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Isaac

# SCIENCE FICTION

\$1.75 MAY 1984

# MAGAZINE

**JOHN VARLEY**  
PRESS ENTER ■

ISAAC ASIMOV  
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THE NUCLEAR  
WINTER



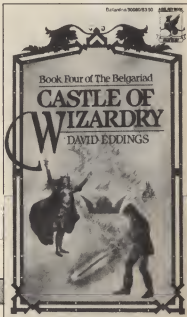
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# EDITORIAL

## CONTROVERSY



by Isaac Asimov

Primarily, this magazine is a vehicle for entertainment. What we hope to do is to give pleasure to as many people as possible and to earn an honest dollar as a result. We do not want to do harm; we do not want to displease.

It is, however, impossible to express opinions of any sort, impossible to approve or disapprove of anything, without running into strong objections on the part of some readers. I suppose we might try to avoid this by retreating into utter blandness, but not only do we refuse to do that under any conditions, we are convinced that even if we did do this, that would not save us.

So while we don't seek controversy, we don't intend to go out of our way to avoid it, either. What's more, I shall not hesitate to speak my mind in these editorials on subjects where it seems to me to be appropriate that I do so. (This magazine is not my private soap-box, I assure you, and I don't treat it as such.)

In the July, 1983, issue, for

instance, we ran the essay "Great Moments in Pseudoscience" by Martin Gardner, in which he did what he has been doing with unwearying skill for most of his life—knocking the stuffing out of pseudoscientific crackpottery.

As it happens, there are a great many people who find themselves attracted to one or another of the fields of pseudoscience—far more than there are people who are totally resistant to such nonsense. A certain number of the pseudoscientiphiles are articulate and intelligent, and a certain number of these read the magazine. Some of these pseudoscientiphilic readers responded to the article angrily, particularly to his references to John W. Campbell, Jr.

Well, we expect that (and so does Martin), but there were some characterizations of Martin himself that were ludicrously wide of the point. I know Martin well and, of the handful of people I am acquainted with who are totally and uncompromisingly ra-

tional, he is the most honest and open-minded. He is the only one, to my knowledge, who, in publishing articles, will go to the trouble of publishing letters that attempt to refute his points, and answering them politely and without venom. I assure you that there is nothing venomous in his constitution.

Some readers seem to think that because John W. Campbell, Jr. was (without question) the greatest editor in science fiction's history, and exerted more influence on the field than anyone else has, that there is something criminal in criticisms of him appearing in a science fiction magazine.

I knew John Campbell well, too, and no one, but *no one*, has more greatly benefited from his constant generous help than I have, something I have attested to over and over again in my writings. Nevertheless to say that in some ways Campbell was a good and kind man, a giant in the field of imagination and ideas, a genius in the art of editing, is not necessarily to say that he was perfect in all respects. (We all revere George Washington, but are we really expected to believe that he never told a lie, just because of a completely fictional tale about a cherry tree?)

The fact is that Campbell had a penchant for accepting pseudoscientific claims uncritically. At one time or another, he

boosted UFOs, the Dean Drive, Dianetics, the Hieronymus machine, and psi powers. He had kind words for magic, too. He felt (he said to me often) that science was too narrow and that by discussing these beyond-the-fringe areas, he was helping to force scientists to investigate areas that might well turn out to be important.

Well, perhaps. That is, after all, the usual rationalization of those who find themselves in the difficult position of yearning for both pseudoscience and respectability. (My intellectual life is an easy one since I yearn for neither.)

However, I spent endless hours discussing these things with Campbell, and it always seemed to me that he wasn't interested in just needling science. He *believed*. And the trouble was that he was charismatic enough to make *others* believe, others who didn't know as much as he himself did and who were much more likely to go off the deep end into even more extreme foolishness.

Those he convinced of the value of pseudoscience and of the wickedness of scientific orthodoxy then convinced others, and this helped spawn the UFOmaniacs, Velikovskians, VonDanikenites, scientologists, pyramid power freaks, psychic surgery nuts, and others who plague us today. He was not the sole originator, to

be sure, and the pseudoscientiphiles would be here today in ample numbers even without him, but he *helped* and in that respect, he did harm to the cause of science.

Nor is it valid to say that it is cowardly to attack Campbell now that he is dead and cannot defend himself. In the first place, the act of death does not convert a person into a plaster saint, or alter truth, and in the second place, there are many who are presently alive and vocal who will gladly defend Campbell, perhaps more loudly and vehemently than Campbell himself would have done.

Finally, Martin argued against Campbell's views when Campbell was alive, and I, for one, denounced those views to Campbell's face on many an occasion. (It did not end our friendship, however. I was too aware of what he had done for me, and, for his part, he was always tolerant of criticism — one of his very many good points, and something I have tried to learn from him, though not always very successfully, alas.)

As for criticisms of him appearing in a science fiction magazine (and in *my* science fiction magazine) that is *exactly* the place for them to appear. If some outsider, some non-SF person, were to deal with Campbell's questionable views in some periodical of general circulation, you can bet that he

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# "MIND-CROGGLING"...

## Harlan Ellison

Best SF Game  
Games Day, London 1982

Best SF Game  
Space Gamer Mag 1980, 1981

2nd Best Family Game  
Games Day, London 1981

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Games Mag. 1980, 1981,  
1982, 1983



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would use those views as a stick with which to beat science fiction. Campbell's pseudoscience would be presented as the inevitable consequence of his interest in science fiction and there would be plenty of indication that science fiction is *part* of pseudoscience and that its readers form the mainstay of pseudoscientiphilism. In fact, I must say that Campbell had harmed not only science, but science fiction itself, in the views he espoused, because he made it possible for outsiders to sneer at and deride science fiction in this way.

Then, too, an outsider who held up Campbell's views to rid-

icule would not know of the many, many ways in which Campbell was great and good and kind. He would present *only* Campbell's flaws and weaknesses.

This is not so here. Martin and I know very well that good science fiction is not to be judged by Campbell's flaws, and that neither is Campbell himself to be judged by them—or, at least, entirely by them.

But let's get beyond John Campbell. Is it possible that "orthodox" science is close-minded and bigoted, and refuses to investigate things that they have already decided, on

emotional grounds perhaps, to be non-existent?

Of course not! Individual scientists may be close-minded and bigoted, because individual scientists are human. Individual scientists are no more "science," than an individual science fiction reader is "science fiction."

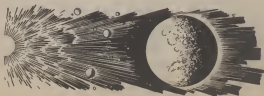
Science is a system of investigation that can be turned on anything. The evidence uncovered by such investigations fails to lend any credence whatever to propositions that perhaps no one believes (that stones fall upward) or to propositions that perhaps millions believe (that ghosts exist.) In fact, the evidence uncovered may argue against some proposition in a seemingly conclusive manner (that the Earth is flat).

Now, then; an individual scientist has a finite lifetime, and in that lifetime he usually wishes to investigate areas that offer the promise of some success so that he may pique his own interest and sate his own curiosity and (being human) so that he may possibly receive honors and respect.

It follows that he is *not* anxious to investigate reports of stones falling upward or of ghosts or of flat-Earth arguments or anything else that falls under the heading of pseudoscience. They are pseudoscience precisely because, even when couched in scientific language, they deal with phenomena that have almost no chance of existing, so that it seems unreasonable to ask a scientist to waste his life on it.

There are many pseudoscientiphiles who demand that scientists investigate one or another variety of nonsense. Why doesn't such a pseudoscientiphile go to the trouble and difficulty of learning to be a scientist and of then investigating his belief himself with the necessary professional skills? If he finds out nothing, he will at least have had a life in which he followed his personal interests; if he finds out something, he may win scientific immortality.

If he simply stands on the sidelines and yells for someone else to do the work and take the risk, he is worth nothing. ●



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# LETTERS

Dear Dr. Asimov,

Terry Paul Calhoun's letter, printed in your October issue, has inspired me to come out of the closet and reveal myself as—a bigot.

You see, it's this thing about the Joanna Russ interview. Now I don't care what her sexual orientation is. But I feel no need to approve of it. I ignored the matter until Mr. Calhoun brought it up, implying that those of us who feel that a homosexual lifestyle is not morally or socially proper merely indulge a silly prejudice.

Well. Consider first of all that this has been the standard viewpoint of the Christian church throughout its existence. I know the endorsement of Christianity won't count for much in an SF magazine, but I question whether even Mr. Calhoun would count Dorothy Day, Thomas Merton, G. K. Chesterton, C. S. Lewis, etc. as mere bigots. Maybe they were wrong, along with lots of others, living or dead. But they weren't the type who believe without good reason.

Second, there *are* good reasons for questioning the wisdom of the homosexual lifestyle, reasons which have no necessary connections with the religious belief. Most obvious of all is the fact that if such practice became too widespread, then in a generation or so, there'd be no one

around to read *Isaac Asimov's Science Fiction Magazine*. Or the excellent fiction of Miss Russ.

Now I doubt it will come to that. But it seems to me that everyone should worry when beliefs that are sincerely held by millions of people are casually dismissed as mere bigotry, without the slightest effort to understand them.

Yours truly,

Hiawatha Bray  
Chicago, IL

*Total universal homosexuality, which you abhor, will certainly end the human species in a century. Total universal chastity, which you possibly admire, will do the same. However detested, homosexuality will never disappear, and however admired, it will never be universal. Where does that leave you?*

—Isaac Asimov

Dear Dr. Asimov:

I am responding to your invitation in the Oct. *IASfm*. Please, go backwards, forwards, side to side or up-down, just don't stop writing! Fact, fiction, history or whatever, you're the best! I am a recently retired electronics engineer who started reading SF magazines about 1930. Before that, starting around 1925, I had read all the hardcover

SF classics in the Chicago Public Library. Through the years I never stopped reading SF. Gernsback was great but Campbell was the best-ever editor. Strange, this is my very first letter to a magazine editor or writer.

In part, this letter is prompted by the "Gaming" column questionnaire. I sent a card to Dana Lombardy but in addition I want to voice a protest to you. I subscribe to *IASfm* for, surprise, science fiction stories. I am also interested in editorials and letters relating to SF. But *please* suppress the games, puzzles, etc. that take up valuable space. For the record, I am a Life Master bridge player who regularly goes to tournaments. I designed and worked with computer hardware for over 25 years. There are plenty of first class books and mags on games and puzzles —yours is a first class magazine of Science Fiction—much- much- more important, and rare.

Harry R. Le Grand  
503 N. Halifax Ave.  
Daytona Beach,  
Florida 32018

*Fear not! I won't stop writing till I stop breathing. The two are the same for me. As for the non-SF parts of the magazine, if everyone agreed one way or the other, we would have no problems, but our readers are a heterogeneous lot and we have to try to find a pleasant compromise.*

—Isaac Asimov

Dear Isaac & Friends,

A hearty "Boo!" to the change of the Table of Contents in the May '83 *IASfm*! As a faithful fan of the magazine, I remained quiet during

the great Battle of the Cover Art, feeling that the quality of the inner contents far outweighed what was on the cover. I even resigned myself to the letters being moved, merely muttering under my breath when I automatically flipped to the back of the magazine, only to find the letters missing. But this newest change is really a mistake which I must comment on. In the past, if I had limited reading time I could check the Table of Contents to find a story of appropriate length. Now there's no way to tell how long a story is unless one flips through the magazine counting pages, chancing an inadvertent glance at the last page (often spoiling the ending of the story). The previous method of listing the Table of Contents was ideal. Putting the non-fiction articles in boldface was especially helpful. Please, please, *PLEASE* reconsider and go back to the old T. of C.!

Joy K. White  
P.O. Box 6726  
New Orleans, LA 70174

*Actually, you can tell the length of the stories even from the new table of contents if you arrange everything yourself in order of increasing numbers. Or else, just read from front cover to back with regard for length. (Some people do that.)*

—Isaac Asimov

*For that matter, the new table of contents spells out how long everything is. Short stories are up to 7500 words long, novelettes are 7500 to 17,500, and novellas are 17,500 to 40,000 words.*

—Shawna McCarthy

Dear Editor,

I would like to applaud your re-



**LOOK  
FOR  
IT!**

sponse to Rinehart S. Potts's letter in the October 1983 issue, in which he stated his view that socialism "kills creativity and freedom."

The purpose for Mr. Potts's letter was to criticize Joanna Russ's view that socialism would make things (including art, literature, etc.) better.

Possibly Ms. Russ and Mr. Potts share the same misconception: that a certain form of government creates, or destroys, good art and literature. Surely that is true for Mr. Potts.

Mr. Potts uses the phrase "... the effects of socialism on art and literature ...", but then describes the effects of present Socialist governments (those called Socialist by the U.S.) on art and literature. I hope that he can recognize the difference.

Good authors and artists are not necessarily born under democratic rule just as surely as they are not born under socialist, anarchist, or communist rule. Though certain governments may discourage a certain artist's viewpoint, it should be understood that this is true of all governments. Any artist whose views are contradictory to his government's will be harassed, even arrested, even killed for his beliefs. This includes the United States. Under McCarthyism, and similar "anti-communist" administrations, any one who was pro-communist or pro-socialist and stated so, no matter how well or articulately he did so, would be persecuted.

Finally, Mr. Potts stated that socialism "kills creativity and freedom ... for all."

It is more likely that govern-

ment, as it stands now, kills creativity and freedom for all opposed to it or its particular manner of governing. Once again, this includes the United States. All governments certainly don't appreciate anti-government ideas, no matter how good or famous the book is that holds them.

I hope that in the future Mr. Potts is a bit slower to condemn socialism (or anything else) for its unerring repression of something as universal as art and literature. Thank You,

John Chapman  
Tarentum, PA

*There are, of course, degrees to this sort of thing. Voltaire flourished under the Bourbon autocracy and satirized the society he lived in more cleverly than anyone else has ever done, but the Bastille yawned as a very real threat. Swift, who was Great Britain's equivalent, kept judiciously anonymous in many cases, but was in lesser danger.*

—Isaac Asimov

Dear Shawna and Dr. I.,

Have just finished reading "Chand Veda" by Tanith Lee (Oct., 1983). Can't say I cared for the last one, "La Reine Blanche," but I do think I have not for a long time read such a story as "Chand Veda." Am left with the feeling of how good it would be to think many people could identify with it, and with what it is saying, and hug it to themselves too, so tight. Worse, the whole thing feels like a Faerie story, and I suspect that if "Chand Veda" is not set in that love of love's land, it was nevertheless per-



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haps born there, as the too few such special wonders as it are known to be. It has made me walk in the wonder anyway.

I'd sure like more.  
With My Best,

Gaird Walling  
West Pittsburg, CA

*I suppose every author would love the feeling of having written a story that stays with at least some of its readers and works its way into the fabric of their lives. However happy this makes you, Gaird, I'm sure it makes Tanith even happier.*

—Isaac Asimov

Dear Dr. Asimov:

Bravo! I refer to your answer to Rachel Barr's letter in the October issue of *IASfm*. I couldn't disagree with her more and it infuriates me to read letters that whine and wheedle about something or other that a single reader happens not to like. There are many of us who greatly enjoy the George and Azazel stories, every bit as much as your larger works. Frankly, I think it's phenomenal that a writer of your caliber, who can create the Foundation series, the Robotics, and all those other fascinating tales, can do such a delightful turn of the pen and give us George and Azazel. And what's so wrong with them anyway, I would like to know? Or better, could Rachel Barr do so well?

I'll be watching for other stories about them over the years. You see, I'm renewed through December 1986, so hopefully I'll get to see one or two more in that length of time. There is a good chance of that, isn't

there?—Even with all your other pressing commitments?

Affectionately,

Mrs. Carol A. Jones  
Cincinnati, OH

*I appreciate the encouragement contained in your letter for stories I can't find time to write frequently but do love when I can find time. However, don't be infuriated. People have the total right to object to any of my stories and I don't in the least mind publishing their objections. I have certainly never expected that I would ever please everyone. And never fear, as you'll find in this issue, more G & A stories are in the pipeline.*

—Isaac Asimov



**Editor's note:**

As some of you may have noticed, we were unable to include "Mooney's Module" in this issue. Gerry Mooney's absence, however, isn't permanent. He'll be back in our next issue.

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# GAMING

by Dana Lombardy

Here are the results of the readers' survey from the questions in the October, 1983, issue of *Iasfm*. Readers were asked to answer each question with an A, B, or C: A = Much Interest (you really want to see it in the column); B = Some Interest (you'd like to see it occasionally); or C = No Interest (don't bother putting it in the column).

The results below show the percentage of readers who marked either A, B, or C answers to each question. I received a total of 85 responses.

*What subject areas interest you?* What categories of games would you like to see in the column?

	A	B	C
1. Science Fiction	85.8	10.6	3.6
2. Fantasy	56.5	30.6	12.9
3. History	14.1	47.1	38.8
4. Abstract	25.9	42.3	31.8

As expected, SF came out on top in interest (96.4% have much or some interest in these games). Fantasy came in higher than anticipated (87.1% have much or some interest in these games), and even historical and abstract (chess, go, etc.) games did reasonably well.

While SF games will predominate in this column, fantasy games will also be reviewed—based on the strong positive response you gave that category.

*What type of games do you like?* Within each category there are different types of games. For example, SF role-playing, SF computer, SF video, etc.

	A	B	C
5. Role-Playing	62.4	23.5	14.1
6. Miniatures	20.0	31.8	48.2
7. Tabletop	43.5	42.4	14.1
8. Computer	38.8	34.1	27.1
9. Video	16.5	32.9	50.6

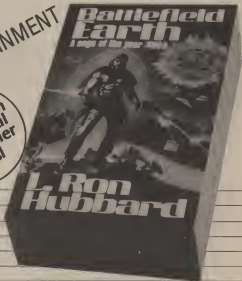
Most of those who responded are role-playing gamers, and responses seem to indicate that you're already into one or another of the existing systems available. Since few new role-playing sys-

(Continued on page 176)

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# MARTIN GARDNER

## TECHNOLOGY ON VZIGS



As all hard-nosed UFO astronauts know, higher intelligences than ours have been exploring planetary civilizations throughout the galaxy for millions of years. Here are some excerpts from a report stored in the memory banks of a vast computer on a planet far from earth.

"Inhabitants of the planet VZIGS, orbiting the star HFM, have developed a technology that is extraordinary in the way portions of it have been simplified. Many of their machines operate on extremely low energy inputs, and are virtually free of maintenance problems.

"1. The sides of dwellings are constructed from congruent modular units in the shapes of rectangular parallelepipeds that are joined to form regular tessellations. Units with edge ratios roughly in the doubling sequence 1:2:4 are fastened together with strong adhesives. Units with more extreme ratios, made of soft organic material, are also used. These are joined by means of small metallic cylinders with conical ends. The cylinders are forced through the units by primitive percussion devices.

"2. Clothing is periodically cleaned by an ingenious mechanism that subjects wet cloth to alternate compressions and expansions by moving the material laterally along a surface with an approximate sine-wave cross section. The device requires no electromagnetic energy, and has no moving parts.

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"3. Wet clothing is dried by an even simpler mechanism, also free of moving parts. No energy is required other than that produced by natural movements of the planet's atmosphere. The device is essentially a long, flexible cylinder.

"4. It seems to be necessary for the creatures of planet VZIGS to keep their food preserved in a moderately cold state. This is done by a machine based solely on the fact that heat is absorbed when a substance changes from solid to liquid state. Again, the apparatus has been simplified so that the only moving parts are panels that open and close to provide access to the mechanism's interior.

"5. Mathematical calculations and symbol processing are habitually performed by a device of incredible simplicity. It is small and portable, uses no energy, and emits no radiation. The operation is almost silent. It is capable of printing the symbols of all the languages spoken by the many species of intelligent protein-based life that flourish on the planet, as well as any desired graphic display. We recommend that the Supreme Council consider the potential usefulness of such a device in the teaching of our children.

"6. One of the strangest aspects of the technology of planet VZIGS is that its principal transportation machine, not only for the creatures themselves but also for materials they desire to be moved from one place to another—is enormously complex. Instead of wheels, it utilizes cumbersome and needlessly intricate levers. The four independent sets of linked levers are operated by sophisticated devices that contract and expand in ways that apparently are controlled by a small computer at the top of the vehicle. The machine clearly operates by the burning of fuel. The fuel enters through an opening at the front, and, as on our ancient spaceships, gas and residues are forced out through a similar aperture at the back. The machine is fitted with perceptrons which for some unknown reason are mounted on left and right sides rather than facing forward. The perceptrons guide the vehicle along any desired path. Movement is slow, but the machine is capable of varying speeds.

"7. Another peculiarity that we observed about the life forms of VZIGS is that its more intelligent species are constantly exchanging circular objects of varying size and made of different kinds of metals and alloys. Most of them bear bas-relief portraits of their leaders. The creatures also seem to enjoy producing millions of tiny rectangular engravings, all identical, displaying pictures in full color of life forms and other objects. These are fastened to larger rectangular objects which are periodically pushed into containers and then distributed to other spots on the planet.

"8. Our observation of the behavior of the creatures has established numerous other incomprehensible practices, of which we will here cite only two:

"At periodic intervals, when not lying in dormant states of brief hibernation, the creatures insert a cylindrical object into their fuel-intake aperture and set fire to it. They allow it to burn almost completely before discarding it. We have been unable to determine the purpose of this bizarre custom.

"At unpredictable moments, one of the creatures will be seized by a sudden paroxysm. A loud explosive noise, often repeated two or more times, accompanies a sudden expulsion of air from a curiously shaped protuberance located between the perceptrons and the creature's fuel-intake opening."

It should not be difficult to guess what the memo is all about, but if any part of it still puzzles you, turn to page 38.



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by Isaac Asimov

■  
We meet again  
the Inimitable (luckily)  
George and Azazel,  
here attempting to aid  
a young woman with  
a rather unusual  
drinking problem.





# THE EVIL DRINK DOES

art: Hank Jankus

"The evil drink does," said George, with a heavily alcoholic sigh, "would be hard to assess."

"Not if you were sober," I said.

He stared at me out of his light blue eyes with a look compounded of reproach and indignation. "When," he said, "was I anything else?"

"Since you were born," I said, and then, realizing I was doing him an injustice, I amended my remark hastily. "Since you were weaned."

"I take it," said George, "that that is one of your ineffectual attempts at humor." And with a fine absence of mind, he lifted my drink to his lips, sipped and put it down again, holding on to it with a grip of iron.

I let it go. Taking a drink from George was much akin to taking a bone from a hungry bulldog.

He said, "In making my remark, I was thinking of a young woman, one in whom I took much interest in an avuncular fashion, by the name of Ishtar Mistik."

"An unusual name," I said.

"But an appropriate one, for Ishtar is the name of the Babylonian goddess of love, and a veritable goddess of love is what Ishtar Mistik was—in potentiality, at least."

Ishtar Mistik [George said] was what would be called a fine figure of a woman, if one had a congenital tendency to deal in understatement. Her face was beautiful in the classic sense, every feature perfect, and it was crowned by an aureole of golden hair that was so fine and sparkling as to seem a halo. Her body could only be described as Aphrodisian. It was billowing and beautiful, a combination of firmness and yieldingness, encased in smooth perfection.

You may wonder, thanks to your foul mind, how I am so aware of the tactile state of her charms, but I assure you it is a long-distance assessment that I can make because of my general experience in such matters, and not because of any direct observation in this particular case.

Fully dressed she would make a better centerfold than any you might find in the more ordinary fashion of display in the magazines devoted to the artistic views of such things. A narrow waist, topped and bottomed by such equi-balanced lushness as you could not well imagine without having seen her; long legs, graceful arms, her every movement designed for rapture.

And although one could scarcely be so coarse-grained as to

demand anything more of such physical perfection, Ishtar also had a keen and supple mind, having completed her studies at Columbia University with a magna cum laude—though one might fairly suppose that the average college professor, in grading Ishtar Mistik, might feel moved to give her the benefit of the doubt. Since you yourself are a professor, my dear friend (and I say this without meaning to hurt your feelings), I can have only the lowest opinion of the profession generally.

One might have thought that, with all this, Ishtar could have her pick of men, and renew her pick from a fresh batch each day. In fact, it had crossed my mind now and then that if she ever picked me I would endeavor to meet the challenge out of my gentlemanly regard for the fair sex, but I must admit I hesitated to make that fact clear to her.

For if Ishtar did have a slight fault, it was that she was rather a formidable creature. She was not more than an inch above six feet and had a voice which, when she was moved, rather resembled a trumpet call. She had been known to have turned on a fairly large hoodlum who had incautiously tried to take liberties with her, lifted him bodily and tossed him across the road, a rather wide one, and into a lamp-post. He spent six months in the hospital.

There was therefore a certain reluctance on the part of the male population to make any advances in her direction, even of the most respectful kind. The undeniable impulse to do so was always aborted by a long consideration as to whether it were physically safe to make the attempt. Even I, myself, brave as a lion though you know me to be, found myself thinking of the possibility of broken bones. Thus, to coin a phrase, conscience doth make cowards of us all.

Ishtar well understood the situation, and complained of it bitterly to me. I remember the occasion very well. It was a gorgeous late spring day and we occupied a bench in Central Park. It was the occasion, I recall, when no fewer than three joggers failed to negotiate a curve while turning to look at Ishtar, and ended up nose to bark with a tree.

"I am likely to remain virginal all my life," she said, her deliciously-curved lower lip trembling. "No one seems interested in me. No one at all. And I will be twenty-five soon."

"You understand, my—my dear," I said, cautiously reaching toward her to pat her hand, "that young men are in awe of your physical perfection and do not feel worthy of you."

"This is ridiculous," she said forcefully enough for distant pas-

sers-by to turn inquiringly in our direction. "What you're trying to say is that they are scared silly of me. There's something about the way in which those silly things look up at me when we're introduced and rub their knuckles after we shake hands, which just tells me that nothing will happen. They just say 'Pleased to meet you' and move away quickly."

"You have to encourage them, Ishtar, dear. You must look upon a man as a fragile flower who can only bloom properly under the warm sunshine of your smile. Somehow you must indicate to him that you are receptive to his advances and will refrain from any attempt to seize him by the collar of his jacket and the seat of his pants and bash his head against the wall."

"I have never done that," she said, indignantly. "Hardly ever. And how on earth do you expect me to indicate myself to be receptive. I smile and say, 'How do you do?' don't I, and I always say, 'What a nice day it is' even when it isn't."

"Not enough, my dear. You must take a man's arm and tuck it gently under your own. You might tweak a man's cheek, stroke his hair, nibble daintily at his finger-tips. Little things like that are indicative of a certain interest, a certain willingness on your part to engage in friendly hugs and kisses."

Ishtar looked horrified. "I couldn't do that. I just couldn't. I was brought up in the strictest possible way. It is impossible for me to behave in anything but the most correct manner. It must be the man who makes the advances and even then I must hold back as hard as I can. My mother always taught me that."

"But, Ishtar, do it when your mother isn't looking."

"I couldn't. I'm just too—too inhibited. Why can't a man just—just come at me?" She flushed at some thought that must have passed through her mind at those words, and her large, but perfectly shaped hand clutched at her heart. (I wondered idly if she knew how privileged her hand was at such a time.)

I think it was the word "inhibited" that gave me my idea. I said, "Ishtar, my child, I have it. You must indulge in alcoholic beverages. There are a number that are quite pleasant-tasting and lend one a healthful invigoration. If you were to invite a young man to share several martinis with you, or vodka sours, or any of a dozen other drinks I might mention, you would find that your inhibitions would quickly decrease and so would his. He would be emboldened to make suggestions to you that no gentleman should make to a lady, and you would be emboldened to giggle when he did so and suggest that you visit a hotel of your acquaintance where your mother would not find you."

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Ishtar sighed, and said, "How wonderful that would be, but it wouldn't work."

"Certainly it would. Almost any man would be glad to join you in a drink. If he hesitates, offer to pick up the check. No man of any worth whatever would refuse a drink when a lady offers to—"

She interrupted. "That's not it. It's *my* problem. I can't drink."

I had never heard of such a thing. "You merely open your mouth, my dear—"

"I know that. I can *drink*—I mean I can swallow the stuff. It's the effect on me. It makes me very woozy."

"But you don't drink *that* much, you—"

"One drink makes me woozy, except when it makes me sick and I throw up. I tried lots of times, and I just can't have more than one drink, and once I have it, I am really in no mood for . . . you know. It's a defect in my metabolism, I believe, but my mother says it's a gift from Heaven designed to keep me virtuous against the wiles of wicked men who would try to deprive me of my purity."

I must admit that I was left nearly speechless for a moment at the thought of someone who would actually find merit in an inability to indulge in the pleasures of the grape. But the thought of such perversity hardened my resolution, and threw me into such a state of indifference to danger that I actually squeezed the resilience of Ishtar's upper arm and said, "My child, leave it to me. I shall arrange everything."

I knew exactly what I had to do.

I have undoubtedly never mentioned my friend, Azazel, to you, for on this subject I am totally discreet—I see you are about to protest that you know of him, and considering your well-known record as a despiser of truth (if I may say this without intention of embarrassing you) I am not surprised.

Azazel is a creature from some far planet whose location I have never learned. He is a member of a civilization whose technology is far beyond ours, though he himself is by no means an impressive member of his society. He is, in point of fact, merely two centimeters tall. That, however, is good since it makes him quite anxious to demonstrate his worth and ability to one like myself whom he is pleased to consider an inferior being.

He responded to my call, as always, although it is useless of you to expect me to give you the details of the method I use for obtaining his presence. It would be beyond your puny brain (no offense) to control him.



He arrived rather out of humor. Apparently, he was watching something in the nature of a sporting event on which he had wagered close to a hundred thousand zakinis and he seemed a little put out at not being able to witness the result. I pointed out that money was dross and that he was put in this Universe to help intelligences in need and not to pile up worthless zakinis which he would, in any case, lose upon the next bet, even if he won them now, which was doubtful.

These rational and unanswerable points did nothing at first to calm down the miserable creature whose predominant characteristic is a rather disgusting tendency to selfishness, so I offered him a quarter-dollar. Aluminum is, I believe, the medium of exchange on his world and while it is not my intention to encourage him to expect a material return for the trifling assistance he might give me, I gathered the quarter was something in excess of a hundred thousand zakinis to him and, in consequence, he rather handsomely admitted that my concerns were of more importance than his own. As I always say, the force of reason is bound to make itself felt eventually.

I explained Ishtar's problem and Azazel said, "For once, you have set me a reasonable problem."

"Of course," I said. After all, as you know, I am not an unreasonable man. I need only have my own way to be satisfied.

"Yes," said Azazel. "Your miserable species does not metabolize alcohol efficiently, so that intermediate products accumulate in the blood stream and these produce various unpleasant symptoms associated with intoxication—a word appropriately derived, my studies of your dictionaries assure me, from Greek words meaning 'poison within.'"

I sneered. The modern Greeks, as you know, mix their wine with rosin, and the ancient Greeks mixed it with water. It was no wonder they spoke of 'poison within,' when they had poisoned the wine before ever drinking it in the first place.

Azazel went on, "It will only be necessary to adjust the enzymes appropriately in order to have her metabolize the alcohol swiftly and unerringly to the stage of the two-carbon fragment which is the metabolic cross-roads for fat, carbohydrate, and protein metabolism and there will then be no evidence of intoxication at all. Alcohol will become a wholesome food for her as it is for us. Of course, we have a substance analogous to your chewing gum, which upon thorough mastication and ingestion allows us to—"

I was, of course, not in the least concerned with the nauseous details of the private vices of Azazel's people. I interrupted, has-

tily, "We have to have *some* intoxication, Azazel; just enough to produce a healthful indifference to foolish strictures learned at the maternal knee."

He seemed to understand me at once. "Ah, yes. I know about mothers. I remember my third mother telling me, 'Azazel, you must never clap your nictitating membranes together in front of a young malobe,' when how else can you—"

I interrupted him again. "Can you arrange for just a slight bit of accumulation of intermediate in order to produce just a wee bit of exhilaration?"

"Easily," said Azazel, and, in an unlovely display of greed, stroked the quarter I gave him, which, on edge, was taller than he was.

It was not till about a week later that I had a chance to test Ishtar. It was in a midtown hotel bar where she illuminated the place to the point where several patrons put on dark glasses and stared.

She giggled. "What are we doing here? You *know* I can't drink." "This won't be a drink, dear girl, not a *drink*. It's just a peppermint squash. You'll like it." I had pre-arranged matters and signalled for a grasshopper.

She sipped at it delicately and said, "Oh, it *is* good," then leaned back and allowed it to pour down her throat with free abandon. She passed the tip of her beautiful tongue over her equally beautiful lips and said, "May I have another?"

"Of course," I said, genially, "At least, you might have one were it not for the fact that I seem to have foolishly left my wallet—"

"Oh, I'll pay. I have *lots* of money."

A beautiful woman, I've always said, stands never so tall as when she stoops to take a wallet out of the purse between her feet.

Under those circumstances, we drank freely. At least, she did. She had another grasshopper, then a vodka sour, then a double whiskey and soda and a few other things and when it was all down, she showed absolutely no sign of intoxication, though her winsome smile was more intoxicating than anything she had imbibed. She said, "I feel so nice and warm, and so *ready*, if you know what I mean."

I thought I did, but I wished to jump to no conclusions. "I don't think your mother would like it." (Testing, testing.)

She said, "What does my mother know about it. Nothing! And what is she *going* to know about it. Nothing." She looked at me

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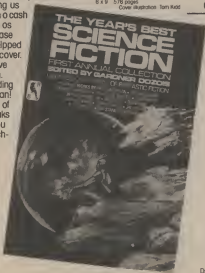
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speculatively, and then leaned over and lifted my hand to her perfect lips. "Where can we go?" she said.

Well, my friend, I think you know my feeling about such things. To refuse a young lady who asks with yearning politeness for a simple favor is not something I am likely to do. I've always been brought up to be a gentleman at all times. But on *this* occasion, several thoughts occurred to me.

First, though you might scarcely credit this, I am a little—just a touch—past my best days, and a woman as young and strong as Ishtar might take some time to satisfy, if you understand me. Then, afterward, if she should remember what had happened, and should choose to resent it and to feel as though I had taken advantage of her, the consequences might be uncomfortable. She was a creature of impulse and she might produce a handful of broken bones before I had a chance to explain.

So I suggested a walk to my rooms and took the long route. The fresh evening air cleared her head of its mild warmth and I was safe.

Others were not. More than one young man came to tell me of Ishtar for, as you know, there is something about the benign dignity of my bearing that elicits confidences. It was never in a bar, unfortunately, for the men in question seemed to avoid bars, for a time, at least. They had usually tried to match Ishtar drink for drink—for just a while—with unhappy results.

"I'm absolutely positive," one of them said, "that she had a hidden pipe that led from the center of her mouth down to a hogshead under the table, but I couldn't spot it. But if you think *that* was something, you should have been there later."

The poor fellow was gaunt with the horror of the experience. He tried to tell me, but he was almost incoherent. "The *demands*," he kept saying over and over again. "Insatiable! Insatiable!"

I was glad I had had the good sense to avoid something that men in their prime had barely survived.

I did not see much of Ishtar at that time, you understand. She was very busy—yet I could see she was consuming the supply of virile men at a fearful rate. Sooner or later she would have to extend her range. It was sooner.

She met me one morning as she was about to leave for the airport. She was more *zaftig* than ever, more pneumatic, more startling in all possible measurements. Nothing of what she had

gone through seemed to have affected her, except for the more and better.

She pulled a bottle out of her purse. "Rum," she said. "They drink that down in the Caribbean and it's a very mild and very pleasant beverage."

"Are you going to the Caribbean, dear?"

"Oh, yes, and elsewhere. The men at home seem to be of poor endurance and weakly spirit. I am very disappointed in them, although there have been moments of high adventure. I am very grateful to you, George, for making it possible. It seems to have begun when you first introduced me to that peppermint squash and the vodka punch. It seems a shame that you and I haven't—"

"Nonsense, dear girl. I work for humanity, you know. I never think of myself at all."

She placed a kiss upon my cheek that burned like sulfuric acid and she was gone. I mopped my brow in considerable relief, but I did flatter myself that for once, my application to Azazel had brought about something that had ended happily, for Ishtar who, through inheritance, was independently wealthy, could now indulge indefinitely and without harm in her artless enthusiasms for alcoholic and masculinic pleasures.

Or so I thought.

It was not until more than a year had passed that I heard from her again. She was back in town and she phoned me. It was a while before I realized who it was. She was hysterical.

"My life is over," she screamed at me. "Even my mother no longer loves me. I can't understand how it happened but I'm sure it's your fault. If you had not introduced me to that peppermint squash and vodka punch, I just know that nothing like this would ever have happened."

"But what has happened, my dear?" I asked, trembling. An Ishtar who was furious with me would not be an Ishtar it would be safe to approach.

"You come here. I'll show you."

My curiosity will someday be the end of me. On that occasion, it nearly was. I couldn't resist going to her mansion on the outskirts of town. Wisely, I left the front door open behind me. When she approached with a butcher knife, I turned and fled with a speed that I would have been proud of in my younger days. Fortunately, she was in no position to follow, considering her condition.

She left again, shortly afterward, and, as far as I know, has not

returned since. I live in dread that someday she will. The Ishtar Mistiks of this world do not forget.

Goerge seemed to think he had come to the end of the story.

"But what had happened?" I asked.

"You don't see? Her body chemistry had been adjusted to convert alcohol very efficiently to the two-carbon-fragment that was the crossroads of carbohydrate, fat, and protein metabolism. Alcohol was to her a healthful food. And she drank like a six-foot sponge—incredibly. And all of it slid down the metabolic chain to the two-carbon-fragment and, from that, up the metabolic chain, to fat. She had, in a word, become stout; in two words, grossly obese. All that gorgeous beauty had expanded and exploded into layer upon layer of lard."

George shook his head in mingled horror and regret and said, "The evil drink does 'would be hard to assess." ●



MARTIN GARDNER

(from page 24)

## SOLUTION TO TECHNOLOGY ON VZIGS

The memo describes life on earth at some time not long before the twentieth century. The modular building units are of course bricks, and planks of wood held together by nails. Clothes are washed on a washboard, dried on a clothesline. Food is kept cold in ice boxes. Mathematical calculations and symbol processing are performed with a pencil. The transportation vehicle is a horse. The circular objects are coins, the engravings are postage stamps. The two behavior patterns are smoking and sneezing.

Now for you word-play buffs, what sort of simple substitution cipher did I use in giving the names of the planet and its star? The answer to this question can be found on page 81.

# The finale to the epic that began with *Gateway*!

## Heechee Rendezvous

by Frederik Pohl

Once the galaxy had been ruled by the Heechee, benevolent aliens with almost godlike powers. But the Heechee had been forced to flee from even more powerful beings to the safety of a black hole. And Robinette Broadhead was determined to chase them through space, perilous though it may be...

## Heechee Rendezvous

Frederik Pohl

Illustration by  
Gordon Stettin

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# VIEWPOINT

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# THE NUCLEAR WINTER

by Carl Sagan

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There seems to be a disturbing resurgence lately in After-The-Bomb, post-Holocaust stories. We've all read them—some of them even in this magazine. Does this sudden upswing in popularity indicate that we are once again willing to believe that there would be an after-the-bomb? The unsettling new findings which follow may well mark the end of such stories, just as explorations of our solar system closed the door on the jungles of Venus and the canals of Mars. Please give it your attention.

---

Carl Sagan, as we all know, is the creator of the enormously popular PBS series *Cosmos*. He is also David Duncan Professor of Astronomy and Space Sciences and director of the Laboratory for Planetary Studies at Cornell University.

# VIEWPOINT

**E**xcept for fools and madmen, everyone knows that nuclear war would be an unprecedented human catastrophe. A more-or-less typical strategic warhead has a yield of two megatons, the explosive equivalent of two million tons of TNT. But two million tons of TNT is about the same as all the bombs exploded in World War II—a single bomb with the explosive power of the entire Second World War but compressed into a few seconds of time and an area 30 or 40 miles across. . . .

In a two-megaton explosion over a fairly large city, buildings would be vaporized, people reduced to atoms and shadows, outlying structures blown down like matchsticks, and raging fires ignited. And if the bomb were exploded on the ground, an enormous crater, like those that can be seen through a telescope on the surface of the Moon, would be all that remained where midtown once had been. There are now more than 50,000 nuclear weapons,

more than 13,000 megatons of yield, deployed in the arsenals of the United States and the Soviet Union—enough to obliterate a million Hiroshimas.

But there are fewer than 3000 cities on the Earth with populations of 100,000 or more. You cannot find anything like a million Hiroshimas to obliterate. Prime military and industrial targets that are far from cities are comparatively rare. Thus, there are vastly more nuclear weapons than are needed for any plausible deterrence of a potential adversary.

Nobody knows, of course, how many megatons would be exploded in a real nuclear war. There are some who think that a nuclear war can be "contained," bottled up before it runs away to involve much of the world's arsenals. But a number of detailed analyses, war games run by the U.S. Department of Defense, and official Soviet pronouncements all indicate that this containment may be too much to hope for. Once the bombs begin exploding,

communications failures, disorganization, fear, the necessity of making in minutes decisions affecting the fates of millions, and the immense psychological burden of knowing that your own loved ones may already have been destroyed are likely to result in a nuclear paroxysm. Many investigations, including a number of studies for the U.S. government, envision the explosion of 5000 to 10,000 megatons—the detonation of tens of thousands of nuclear weapons that now sit quietly, inconspicuously, in missile silos, submarines, and long-range bombers, faithful servants awaiting orders.

The World Health Organization, in a recent detailed study chaired by Sune K. Bergstrom (the 1982 Nobel laureate in physiology and medicine), concludes that 1.1 billion people would be killed outright in such a nuclear war, mainly in the United States, the Soviet Union, Europe, China, and Japan. An additional 1.1 billion people would suffer

serious injuries and radiation sickness, for which medical help would be unavailable. It thus seems possible that more than two billion people—almost half of all the humans on Earth—would be destroyed in the immediate aftermath of a global thermonuclear war. This would represent by far the greatest disaster in the history of the human species and, with no other adverse effects, would probably be enough to reduce at least the Northern Hemisphere to a state of prolonged agony and barbarism. Unfortunately, the real situation would be much worse.

In technical studies of the consequences of nuclear weapons explosions, there has been a dangerous tendency to underestimate the results. This is partly due to a tradition of conservatism which generally works well in science but which is of more dubious applicability when the lives of billions of people are at stake. In the Bravo test of March 1, 1954, a

# VIEWPOINT

15-megaton thermonuclear bomb was exploded on Bikini Atoll. It had about double the yield expected, and there was an unanticipated last-minute shift in the wind direction. As a result, deadly radioactive fallout came down on Rongelap in the Marshall Islands, more than 200

kilometers away. Almost all the children on Rongelap subsequently developed thyroid nodules and lesions, and other long-term medical problems, due to the radioactive fallout.

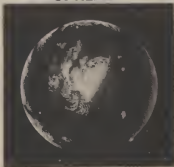
Likewise, in 1973, it was discovered that high-yield airbursts will chemically burn

## THE WAR BEGINS



Looking down on the North Pole as a global nuclear war begins. The boundary between night and day cuts through the USSR (bottom) and grazes the west coast of the U.S. (top right). Only about 100 of the 10,000 explosions in such a war are detonated at the moment depicted. Each flash over a city typically represents the deaths of hundreds of thousands. Fires are beginning to generate dense smoke clouds.

## THE CLOUDS SPREAD



Days later, the dark clouds of soot and dust have spread over all northern midlatitudes, although there are still some moving clear patches. Northern Scandinavia, northern Canada and the Arctic Icepack have not yet been obscured. The clouds are now moving into Africa, southern Asia, and Central America. Several late nuclear explosions from delayed launches can also be seen.

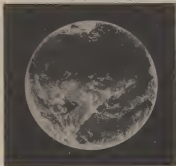
Illustrations by Jon Lomberg courtesy of Parade Magazine

the nitrogen in the upper air, converting it into oxides of nitrogen; these, in turn, combine with and destroy the protective ozone in the Earth's stratosphere. The surface of the Earth is shielded from deadly solar ultraviolet radiation by a layer of ozone so tenuous that, were it

brought down to sea level, it would be only three millimeters thick. Partial destruction of this ozone layer can have serious consequences for the biology of the entire planet.

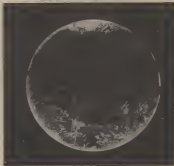
These discoveries, and others like them, were made by chance. They were largely

## **THE CHILL DESCENDS**



Now South America is near the center of the picture. It is a few weeks after the exchange, the main obscuring cloud has arrived at the Equator, and some dark streamers have already breached it. Temperatures beneath the dark clouds in the Northern Hemisphere have plummeted far below freezing, and the Southern Hemisphere is just beginning to be affected. The Northern Hemisphere is almost entirely obscured.

## **THE EARTH IS ENVELOPED**



Still later, much of the Southern Hemisphere is darkened and chilled. A chain of ecological consequences will devastate many areas not covered by the clouds. After the clouds fall out, the depleted ozone layer will let through dangerous amounts of solar ultraviolet light. The long-term prospects for the human species are uncertain if the conditions that permit such a war are allowed to continue.

# VIEWPOINT

unexpected. And now another consequence—by far the most dire—has been uncovered, again more or less by accident.

The U.S. Mariner 9 spacecraft, the first vehicle to orbit another planet, arrived at Mars in late 1971. The planet was enveloped in a global dust storm. As the fine particles slowly fell out, we were able to measure temperature changes in the atmosphere and on the surface. Soon it became clear what had happened:

The dust, lofted by high winds off the desert into the upper Martian atmosphere, had absorbed the incoming sunlight and prevented much of it from reaching the ground. Heated by the sunlight, the dust warmed the adjacent air. But the surface, enveloped in partial darkness, became much chillier than usual. Months later, after the dust fell out of the atmosphere, the upper air cooled and the surface warmed, both returning to their normal conditions. We were able to calculate accurately, from how much

dust there was in the atmosphere, how cool the Martian surface ought to have been.

Afterwards, I and my colleagues, James B. Pollack and Brian Toon of NASA's Ames Research Center, were eager to apply these insights to the Earth. In a volcanic explosion, dust aerosols are lofted into the high atmosphere. We calculated by how much the Earth's global temperature should decline after a major volcanic explosion and found that our results (generally a fraction of a degree) were in good accord with actual measurements. Joining forces with Richard Turco, who has studied the effects of nuclear weapons for many years, we then began to turn our attention to the climatic effects of nuclear war. [The scientific paper, "Global Atmospheric Consequences of Nuclear War," is written by R.P. Turco, O.B. Toon, T.P. Ackerman, J.B. Pollack, and Carl Sagan. From the last names of the authors, this work is generally referred to as "TTAPS."]

We knew that nuclear

explosions, particularly groundbursts, would lift an enormous quantity of fine soil particles into the atmosphere (more than 100,000 tons of fine dust for every megaton exploded in a surface burst). Our work was further spurred by Paul Crutzen of the Max Planck Institute for Chemistry in Mainz, West Germany, and by John Birks of the University of Colorado, who pointed out that huge quantities of smoke would be generated in the burning of cities and forests following a nuclear war.

Groundbursts—at hardened missile silos, for example—generate fine dust. Airbursts—over cities and unhardened military installations—make fires and therefore smoke. The amount of dust and soot generated depends on the conduct of the war, the yields of the weapons employed and the ratio of ground bursts to airbursts. So we ran computer models for several dozen different nuclear war scenarios. Our baseline case, as in many other studies, was a 5000-megaton war with only a

modest fraction of the yield (20 percent) expended on urban or industrial targets. Our job, for each case, was to follow the dust and smoke generated, see how much sunlight was absorbed and by how much the temperatures changed, figure out how the particles spread in longitude and latitude, and calculate how long before it all fell out of the air back onto the surface. Since the radioactivity would be attached to these same fine particles, our calculations also revealed the extent and timing of the subsequent radioactive fallout.

Some of what I am about to describe is horrifying. I know, because it horrifies me. There is a tendency—psychiatrists call it "denial"—to put it out of our minds, not to think about it. But if we are to deal intelligently, wisely, with the nuclear arms race, then we must steel ourselves to contemplate the horrors of nuclear war.

The results of our calculations astonished us. In the baseline case, the amount of sunlight at the ground was

# VIEWPOINT

reduced to a few percent of normal—much darker, in daylight, than in a heavy overcast and too dark for plants to make a living from photosynthesis. At least in the Northern Hemisphere, where the great preponderance of strategic targets lies, an unbroken and deadly gloom would persist for weeks.

Even more unexpected were the temperatures calculated. In the baseline case, land temperatures, except for narrow strips of coastline, dropped to minus 25° Celsius (minus 13° Fahrenheit) and stayed below freezing for months—even for a summer war. (Because the atmospheric structure becomes much more stable as the upper atmosphere is heated and the lower air is cooled, we may have severely *underestimated* how long the cold and the dark would last.) The oceans, a significant heat reservoir, would not freeze, however, and a major ice age would probably not be triggered. But because the temperatures would drop so catastrophically, virtually all crops and farm animals, at

least in the Northern Hemisphere, would be destroyed, as would most varieties of uncultivated or undomesticated food supplies. Most of the human survivors would starve.

In addition, the amount of radioactive fallout is much more than expected. Many previous calculations simply ignored the intermediate time-scale fallout. That is, calculations were made for the prompt fallout—the plumes of radioactive debris blown downwind from each target—and for the long-term fallout, the fine radioactive particles lofted into the stratosphere that would descend about a year later, after most of the radioactivity had decayed. However, the radioactivity carried into the upper atmosphere (but not as high as the stratosphere) seems to have been largely forgotten. We found for the baseline case that roughly 30 percent of the land at northern midlatitudes could receive a radioactive dose greater than 250 rads, and that about 50 percent of northern midlatitudes could



receive a dose greater than 100 rads. A 100-rad dose is the equivalent of about 1000 medical X-rays. A 400-rad dose will, more likely than not, kill you.

The cold, the dark, and the intense radioactivity, together lasting for months, represent a severe assault on our civilization and our species. Civil and sanitary services would be wiped out. Medical facilities, drugs, the most rudimentary means for relieving the vast human suffering, would be unavailable. Any but the most elaborate shelters would be useless, quite apart from the question of what good it might be to emerge a few months later. Synthetics burned in the destruction of the cities would produce a wide variety of toxic gases, including carbon monoxide, cyanides, dioxins, and furans. After the dust and soot settled out, the solar ultraviolet flux would be much larger than its present value. Immunity to disease would decline. Epidemics and pandemics would be rampant, especially after the billion or so unburied bodies began to

thaw. Moreover, the combined influence of these severe and simultaneous stresses on life are likely to produce even more adverse consequences—biologists call them synergisms—that we are not yet wise enough to foresee.

So far, we have talked only of the Northern Hemisphere. But it now seems—unlike the case of a single nuclear weapons test—that in a real nuclear war, the heating of the vast quantities of atmospheric dust and soot in northern midlatitudes will transport these fine particles toward and across the Equator. We see just this happening in Martian dust storms. The Southern Hemisphere would experience effects that, while less severe than in the Northern Hemisphere, are nevertheless extremely ominous. The illusion with which some people in the Northern Hemisphere reassure themselves—catching an Air New Zealand flight in a time of serious international crisis, or the like—is now much less tenable, even on the narrow

# VIEWPOINT

issue of personal survival for those with the price of a ticket.

But what if nuclear war *can* be contained, and much less than 5000 megatons is detonated? Perhaps the greatest surprise in our work was that even small nuclear wars can have devastating climatic effects. We considered a war in which a mere 100 megatons were exploded, less than one percent of the world arsenals, and only in low-yield airbusts over cities. This scenario, we found, would ignite thousands of fires, and the smoke from these fires alone would be enough to generate an epoch of cold and dark almost as severe as in the 5000-megaton case. The threshold for what Richard Turco has called The Nuclear Winter is very low.

Could we have overlooked some important effect? The carrying of dust and soot from the Northern to the Southern Hemisphere (as well as more local atmospheric circulation) will certainly thin the clouds out over the Northern Hemisphere. But, in many cases, this thinning would be

insufficient to render the climatic consequences tolerable—and every time it got better in the Northern Hemisphere, it would get worse in the Southern.

Our results have been carefully scrutinized by more than 100 scientists in the United States, Europe, and the Soviet Union. There are still arguments on points of detail. But the overall conclusion seems to be agreed upon: There are severe and previously unanticipated global consequences of nuclear war—subfreezing temperatures in a twilight radioactive gloom lasting for months or longer.

Scientists initially underestimated the effects of fallout, were amazed that nuclear explosions in space disabled distant satellites, had no idea that the fireballs from high-yield thermonuclear explosions could deplete the ozone layer, and missed altogether the possible climatic effects of nuclear dust and smoke. What else have we overlooked?

Nuclear war is a problem

that can be treated only theoretically. It is not amenable to experimentation. Conceivably, we have left something important out of our analysis, and the effects are more modest than we calculate. On the other hand, it is also possible—and, from previous experience, even likely—that there are further adverse effects that no one has yet been wise enough to recognize. With billions of lives at stake, where does conservatism lie—in assuming that the results will be better than we calculate, or worse?

Many biologists, considering the nuclear winter that these calculations describe, believe they carry somber implications for life on Earth. Many species of plants and animals would become extinct. Vast numbers of surviving humans would starve to death. The delicate ecological relations that bind together organisms on Earth in a fabric of mutual dependency would be torn, perhaps irreparably. There is little question that our global

civilization would be destroyed. The human population would be reduced to prehistoric levels, or less. Life for any survivors would be extremely hard. And there seems to be a real possibility of the extinction of the human species.

It is now almost 40 years since the invention of nuclear weapons. We have not yet experienced a global thermonuclear war—although on more than one occasion we have come tremulously close. I do not think our luck can hold forever. Men and machines are fallible, as recent events remind us. Fools and madmen do exist, and sometimes rise to power. Concentrating always on the near future, we have ignored the long-term consequences of our actions. We have placed our civilization and our species in jeopardy.

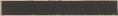
Fortunately, it is not yet too late. We can safeguard the planetary civilization and the human family if we so choose. There is no more important or more urgent issue. ●



# BUZZY GONE BLUE

by Marc Laidlaw

art: Theresa Paulina Florenza

  
The author, who says  
he's lived all over the West Coast,  
has sold stories to  
*Omni*, *F & SF*, *The Year's Best Science Fiction* #8,  
and many other SF markets.

We think that's quite  
an accomplishment for  
someone who's only 23,  
and we hope we'll be seeing  
more stories like the one  
that follows.

When the crowd in the Pandemonium surged over the stage, Buzzy Stomper (aka Dale Reynolds) was caught in the worst of it, shaking a BB-filled beer bottle to the beat until there was no beat left because the mob had overrun the band and bashed the drummer dead with his own massive sticks. Around and around Buzzy whirled beneath rainbow klieg lights, the crazy spectrum fusing his vision to a swirling milky haze that would not release him even when he shut his eyes, curled up like a fetus, and set himself adrift on the violent sea of flesh. He went down deep for as long as it lasted, and came up somewhere very different.

"Now, son," said a reasonable voice, "you don't belong with this crowd. Can't you feel that inside? You were lonely before you met them, sure; but are you any better off now? There's people who love you, son, people waiting for you."

"Who—who are you?" Buzzy said. "Hello? Hey!"

He heard sirens and the static boom of police radios, but he still

couldn't see a thing. Ice brushed his face and seeped through the seat of his pants. His hands were numb but hints of pain came slicing through the chill as he raised them before his eyes. As if through a veil he saw that his fingers were bloody.

"Never again," he said, and his voice snapped.

A taxi swooped close enough to whack his polished cotton cuffs with its curb-feeler. He waved it away with a shout roughened on the broken edges of his voice.

He stood up, swayed, caught himself on a lamp-post. It started to drizzle; his hands stung as the rain rinsed them clean. Had he hurt anyone else in the riot? He remembered the crackle of breaking glass, the small storm of BBs scattering underfoot, and a shocked cry that could have been his own or anybody's voice.

When he caught a bus, he dropped down next to an old lady who got up and stood in the aisle. Another time he might have argued with her—"What's wrong, I'll contaminate you?"—but his voice sounded so different tonight that it scared him. He felt weak from bleeding. No one else sat next to him, though the bus got crowded.

He stared at his reflection in the black window and thought he saw eyes like pickled onions sunk in a skull's face. His long forelock, braided with ragged bits of tinfoil, lay snarled upon his cheeks; he felt a tender lump rising in the close-cut hair at the back of his scalp. He moaned. No more. No more scuzz music; no more Kellies with their kohl-blackened eyes, black lips, and even blacker hearts; no more drinking; no more nothing, if that was what it took to get out of this mess.

When he got to his apartment he filled a dozen index cards with pleas for help:

WASTED SCUZZ SEEKS NEW SEEN

I'm tired of stupid musick, gang fights,

Commercial anarky, you name it.

Howboutit?

Call me Dale at 555-0000

He went to sleep dreaming of a new life.

The radio woke him at noon. He painted his hands with merthiolate while the dj tried to describe the riot at the Pandemonium Auditorium and got it all wrong. When he learned of the death of Happy Clubs, the drummer, he sighed and gathered up his index cards.

The twelfth went up in "HowboutaSpin?" Used Records. As he

tacked it to the cork, a girl looking over his shoulder said, "Fuck you, too, burby."

He spun around to see a tall scuzz wearing a torn and blood-stained t-shirt, one black nipple visible, her scorched hair sculpted into lumps with pomade or rubber cement.

"Hey," he said, his voice like gravel in a cement mixer, "I love America."

The old beatnik behind the counter said, "Not in here, freaks. Kid, you want to show me that card?"

The girl went out and slammed the door, making a record skip and stick. A woman kept singing:

*"I'm a loud crybaby and—  
baby and—  
baby and—"*

"I'm paying my dues," Dale said, handing across his card. The man glanced at him over his shades, looking surprised as he lifted the playing arm from the album.

"You like this?" the man asked.

"What?"

The needle tapped into the groove.

*"I try to sulk in silence  
But it's never any use,  
I'm a loud crybaby and  
I'm paying my blues."*

"I hate mellow," Dale said.

"Ah." The beatnik read his card, shrugged, said, "This is okay."

As Dale pinned up the card, the man said, "Looks like you got a dose of the blues, kid. You should check it out."

"What do you mean, blues? Boozy, weepy stuff? Nah."

"You find you're singing the blues without knowing the words, it's time to check it out. You play anything, kid?"

"Don't call me that, I'm twenty-four."

"Get an axe. Learn how to play." The man sat back grinning, his fingers caught in a scruffy goatee straight out of a beach-party movie. "Yeah, I know a good lady; bet she could even teach you. That's her card, right next to yours."

"Nah," Dale said, "I don't like that stuff."

The old beatnik shrugged and turned away to ring up a sale.

*"Now let me tell you something*

*You prob'ly didn't know,  
I'm a lightsleepin' lady  
And I'll never let you go."*

"Nah," Dale said again, but he took down the number on the blues card.

"Hey, kid," said the man as he went out. "Blues keep calling." He waited by the phone all afternoon. It rang once. It was Kelly. "Don't hang up!" she said. "Disguising your voice won't help. We have to talk."

"There's nothing left to say, Kel. Drop it. You wouldn't like me anymore."

"Buzzy . . ."

"I'm out of it. I'm splitting with scuzz and that's the only thing we ever shared, ever."

"Then those were your cards."

"You saw them?"

"I hate that name: Dale."

"Gee, thanks. You sure do patch things up all right."

He hung up, waited a second, and lifted the receiver so that she could not call back. He found himself punching a number he had thought forgotten, and a tired-sounding woman answered.

"Chrissie," he said, "can I borrow your guitar?"

"Who is this? My God, Dale? What happened to your voice? Hey, Frank, it's my never-loving brother! Dale, dearest, have you had a nice life? No, don't tell me. You're out of food stamps and you want to come for Thanksgiving dinner."

"Come on, sis. You should be so lucky. What about the guitar? You'll never use it."

"As a matter of fact we were talking about getting lessons for Sandra."

"Sandra? She's only three years old."

"She's four, jerk! If you called to make trouble . . ."

"Nah, I called to borrow your guitar."

"Say 'pretty pl—' Christ, I must be crazy! I'm supposed to support your sickening lifestyle?"

"Ah, I'm out of scuzz, sis. I'm gonna play the blues now . . . the way it oughta be played."

He had thought that would impress her, but she started laughing and he wanted to hit her the way he had used to do.

"I'm serious," he said.

"Oh, sure you are. What's your favorite old blues song, Buzzy-Wuzzy? Come on, this is a pop quiz."



"'Paying My Blues,'" he said, hoping that was the right title.

She stopped laughing and said nothing for a moment. He guessed that she didn't know a thing about the blues.

"So can I come over tonight?"

"How polite of you to ask. I thought you'd never visit the suburbs."

"Nah, the burbs aren't so bad if you're dead."

Another pause. "Well, we'd love to have you," she said. "Frank can show off his four-wheeler. Oh my God, the cat—"

He took his chance to hang up.

That evening, riding back to the city with a Penncrest guitar in a plastic zippered case, he asked himself what he thought he was doing chasing the blues. He had not done anything so abrupt since his first jump onto a scuzz dance floor when he turned twenty-one. In one week he had transformed himself from meek Dale Reynolds to hard-drinking Buzzy Stomper; all it had taken was a haircut.

Now what am I going to do about my hair? he wondered, catching his reflection in a fish-eye mirror. I'll crop the front, let it grow out in back, and wear a hat in the meantime. Yeah.

His grin widened to fill the bulging mirror. It was the wrong expression, too much Cheshire cat. He slumped down and tried to look sulky. In the mirror he saw a curving black man behind him shake his head.

"Ain't I blue?" Dale said.

"'Am I,'" said the man.

He called the blues lady when he got home and she answered before he heard a ring.

"Are you the one who teaches the blues?"

There was a long pause before she said, "Who is this?"

"My name's Dale Reynolds. I got your number in a record store and I wanted to take blues guitar lessons." He waited. "Hello?"

"I'm sorry. Dale'd you say your name was? Why don't you give me your phone number?"

He gave it to her.

"When were you wanting to come over, Dale?"

"I'm out of work, so any time's fine."

She considered this for almost a minute.

"Tomorrow morning, then," she said. "Eleven o'clock, how does that sound? Let me give you my address."

As she spoke her voice kept drifting like smoke in shifting wind. He got her address, but lost hope of hearing anything beyond that as she faded away.

"I'll see you at eleven," he shouted. His sandpapery voice sounded familiar to him now. Why didn't it heal?

He hung up and sat for a long time looking at the guitar in its case and thinking of that faraway voice. Blues woman; she had sounded kind. For some reason he pictured her sitting in shadows downtown, maybe in a cocktail bar or maybe in her room. There was a drink in her hand and tears on her cheeks. She had black eyes, black skin, long hair so black it shone blue; but she would not look at him. A fine blues woman. He heard the rustle of her black silk dress as she put down her glass and turned to face him, smiling. Wiping away her tears she began to hum a lullabye. It worked.

At eleven o'clock she buzzed him into the lobby of her building. It was dark inside and the red-shaded lamps made it look darker. He opened the cage of an ancient elevator and stepped in, swinging the guitar out of the way before the closing bars could crush it.

The fourth floor was badly lit. A door opened ahead of him and he realized that he was trembling.

She was an old black woman, her hair grey and her eyes filmy, her skin as dark as something gone bad. She wore not a black silk gown but a limp robe of yellow flannel.

She looked through him, wide-eyed, and said in a clear strong voice, "I'm blind but never mind that. Come on in."

A second look into her eyes showed them to be bright beneath the tarnish of age. She touched his wrist and patted the guitar, guiding him through the door into the smallest apartment he had ever seen. It held a bed covered by a patchwork quilt; a low coffee table on which rested an ashtray, a pack of cigarettes, and a hotplate; a tiny refrigerator was flanked by shut doors. Narrow shelves full of bric-a-brac and photographs climbed the walls. Venetian blinds let in enough light to show that all the pictures were of black people—blues musicians, he guessed—and almost all were autographed. A Victrola phonograph took up one corner.

"Have a seat on the bed, Dale. Can you tune your guitar?"

He sat and unzipped the case.

"No," he said. "I've never played anything but, uh, a rattle."

She sat beside him, her head shaking slightly with tremors of age. It was obvious, although she did not look at him, that he had her full attention. She reached around the side of the bed and brought out an old guitar. She strummed it, tuned a string, and sat waiting with a cigarette hanging in her lips while he tried to position his instrument as she had done.

He strummed once.

"Ooh, ouch!" she said, laughing. She plucked the lowest note on her guitar. "Can you get this?"

He twisted a peg until he had what he thought was the same sound. She gave him the next and he found it. Soon his guitar was tuned.

"Good," she said, breathless. "That's real good."

She started coughing and the cigarette fell to the floor. He picked it up and dropped it in the ashtray. As he straightened he felt her frail, bony hand on his knee.

"You're good," she said. "You got it."

"Nah, I—"

"I can tell, now, yes I can. Dale, what's the blues to you?"

"Kind of . . . I guess I don't know." He cleared his throat, uncomfortable. "Uh, I've been listening to rock. I—"

"Do you hear it, son?"

She leaned forward, eager to hear him, and he thought there would never be another sound in the whole city unless he made it. He found himself in shadow, then in darkness and in rain, waiting for a bus. He felt the ache of his injured hand clenching a broken bottle or the neck of the guitar.

Playing a note at a time caused less discord than strumming did. It did not sound like much, but she never stopped him. She listened and soon started tapping her foot.

I don't know what I'm doing, he thought. I better just play.

"Yeah," she said. "You got it."

"I can't—"

"Now, don't talk!"

The frustration in his fingers shocked him; they wanted to tear at the strings. He was shaking, shaking the whole bed. The room got so dark that for an instant his hands were invisible. All he could see were the glowing ember of the cigarette butt and its luminous smoke rippling upward.

The red spark glinted and went out. He heard silk.

She said, "I can't hardly believe it's you."

The room returned as a blue glow of neon flashed through the shades. The sign shut off, leaving them in night for a moment; then it came on again for a few seconds more.

"Laura," he said.

"That's my name, lover."

A sudden sharpness hidden in the depths of his heart came up from within like a memory of pain. Its blossoming was agony in

his breast, but then it softened and all he had to do was cry and he could bear it, cry and it was all right.

In the moments of cool blue light she was young, so young, and her clear, wide eyes took him in. Her hands lay warm and full-fleshed on his knees. He leaned close and she opened her lips to catch his breath. They laid down their guitars and she cradled his face where her neck and shoulders joined. Her skin drank his tears. Her hair smelled like ash; even so, he wanted to taste it. Incredulous, he drew back and stared at the smoothness of her skin, her youth.

He leaned to kiss her on the mouth, but she stopped him with her palm. "No . . . no, not that close."

"Why?" he said, his rough voice sounding soft in his ears.

"I don't want to end it, honey," she said, looking from one of his eyes to the other and back. "I'm afraid it'll change. This has to be it for now. I want you too, so be careful."

He did not press her. He believed she knew better than he what was happening.

"Play," she said. "Play and I'll tell you how it is."

He took up her guitar. The sound that came out of it was unbelievable. Its body lay warm in his lap and under his arm; he could almost believe it was Laura he played.

He tried to pick out a tune to match the neon and his waking dream. He saw in a glance that his hands were black and gave it no thought while she sang. She blew away his thoughts as if they were old leaves ready to fall.

She stopped all of a sudden. He played on.

"Do you gamble?" she said, her voice stern.

He met her eyes. "Not any more, honey."

"You never lied to me," she said. "I know you wouldn't start now."

"No reason to do so, honey, if you ask the right questions. I love you, don't you know that? I come back because I still love you."

"Luther . . . my man. Do you know who you are? Do you remember Dale?"

He took the cigarette from the ashtray. It was burning again.

"Now who would that be?" he said, considering the name but finding nothing in it he recognized.

"Dale is a boy I know," she said. "A fascinating boy. No, a fascinated boy. He's learning the blues, Luther."

"Don't you talk about no boy, Laura, or I'll stop playing and see you put him out of your head."

She moved away, drawing her legs close to her, and the light

changed, grew colder and harsher. The instances of darkness got longer.

"Luther, I see blood on your hands," she said. "You always bled for your music."

"Not this time, honey, not even for the blues this time. For you. This blood woke me up and brought me home."

Her body—now silhouetted against the blue neon slats, now lost in the night—began to shake. She put her face in her hands as her hair fell across her arms. He heard her crying and his playing softened. The thing was, sobbing sounded like laughter; he could not quite make out her mood . . . never could.

"I thought I'd stopped waiting, Luth," she said. "I kept calling, playing this old guitar, calling your name. I never thought you would come. It's been so long."

"I know it, honey."

She touched his face. "You're different."

"I had to change, Laura. I can see you're still scared of me but you shouldn't be. I wouldn't hurt you now. I haven't got it in me anymore. That's no lie."

His breath caught in his throat and he realized it was all about to change again. Would he remember who he was?

"Call me!" he gasped.

Neon was extinguished and the dark went on and on. He felt a chill and the sunlight came back from wherever it had gone. It lit the old blind woman and the young man, both listening to the last note he had played fading away. The guitar hummed for a long time under Dale's arm.

"You come back tomorrow," she said.

"What do I owe you?" he asked.

"You just come back and we'll talk about it."

She went to the door while he packed up his guitar. As he passed, she touched his hand again and made a puzzled sound.

He stopped in the hall.

"Is there something—?" he said.

Her fingers slid along the door frame. "You're white," she said. "Are you?"

"That's me."

She smiled. "It don't matter, but it's strange."

"Strange?" he said.

She withdrew and shut the door.

He stood on the sidewalk feeling dazed, empty, depressed. His

fingertips hurt, so he knew he had played . . . but he hardly remembered a thing about the lesson.

What now? What did he usually do all day? He tried to remember the details of his life but it was impossible until he thought of a reason. In high school he had learned that if he studied when he was drunk, he had to drink again to bring to mind what he had learned. No wonder he couldn't remember what he had been doing with his life. There was nothing before this afternoon as far as he knew. No wonder he felt so bad.

With a bottle of whiskey he waited for evening. Memories, he thought, would return at night. He measured his drinks by the sundial shadows of tenements. At sunset he let loose and drained the bottle.

The phone rang. He knocked it to the floor in answering it.

"'lo?" His voice had thickened, its gravel tones melting away with the setting sun.

"You still drinking?" said a woman. "Good thing I didn't ask you that. Never want you to have to lie."

It took him forever to recognize her.

"Lau—Laura?" he said.

"You remember my name. That's good."

"I'm good," he said. "Good and drunk."

"Listen, now, I want you to hear something."

It was dark and he could not find a light. Where did he keep that neon?

"Hey," he said. "I don't really know your name!"

He heard static, gentle scraping, a bump. The telephone began to woo him with a song. A few slow heartbeats passed among snare-drums, a mellow guitar, and a faraway saxophone. Then she started singing:

*"Baby, you leave me nothing  
But your burned-up cigarettes.  
You take my heart,  
You take my soul,  
An' run off with the rent.  
An' I could—"*

He dropped the phone and followed it to the floor. She started to speak but he slammed the receiver into its cradle and cut her off.

He was shaking, his teeth chattering. The last line of the song was stuck playing over and over in his head: "An' I could—An'

*I could—An' I could—*" He could almost remember what came next, the way he had almost known the words to "Paying My Blues." Almost . . .

He did remember something, now that he was drunk. He remembered picking up *his* guitar in the old lady's apartment, playing awhile, and putting down *her* instrument when he left. No memory of trading guitars joined the ends of his lesson.

He was afraid. That sort of thing was better left forgotten; it was not at all what he had wanted to find when he ran away from scuzz.

Scuzz. It sounded good to him at that moment; it sounded like just what he needed.

How do I know her name? he wondered, stalking past deserted bars whose façades boasted ludicrous pornography. Unless she told me and made me forget. Hypnosis, something crazy. I was out of my mind.

He sat drinking in a scuzz club until it was crowded and the shows got underway. In a dark corner he waited, patiently keeping himself from remembering any more than he wanted to. It was pointless. He was most afraid of what he could not remember. In his head he heard music that no scuzz band could play. He drank more to muffle it, and the haze spread over everything.

Dale Reynolds went away.

Buzzy Stomper, drunker than he had ever been before in his life, stumbled onto the dance floor, pulled together every thought and memory in his head, and lost control. He glared at the laser lights, screaming out secrets he could only confide to a crowd; there was no one to hear his confession in all the noise. He made himself hoarse again.

Then Kelly danced up to him.

At first he didn't recognize her. She looked like half-a-dozen other girls in the club, dressed all in black, her black hair cut short, her features gaunt and ratlike. Fractured razor beams of laser light swept across her black eyeshadow, exposing the lace-work contours of burst capillaries that she covered every morning. She was that close before he knew her.

"Hi, lover!" she yelled, and the boy with her grinned. "Didn't think you'd be back!"

Buzzy grabbed for her wrist in the approved scuzz style, but she jumped away. Her boyfriend stepped closer. Buzzy's hand ached for his good old bottle of BBs.

"C'mon, man," said the boyfriend, sharp-nailed fingers curling.

Buzzy shook his head and swept his hand past his eyes, as if

willing the whole scene to vanish. He turned and forced his way from the crowd, crossed the bar to a dark telephone booth. He found a dime and dialled a number from memory.

*"An' I could—An' I could—"*

"Hello?"

"This is Dale," he said.

"Dale, is it?"

"Yeah."

"Well, I'm glad you called. I was just thinking about you. There's something I want to play for you, Dale. Will you listen and tell me what you think?"

He did not answer for a moment.

"Dale?"

He plugged his ear with a finger to block out the scuzz.

"I'll let you know," he said.

The needle dropped.

He was scared. It was the same song.

*"Baby, you leave me nothing  
But your burned-up cigarettes.  
You take my heart,  
You take my soul,  
An' run off with the rent . . ."*

His heart nudged his ribs and pain filled his chest: the pain of memory, the memory of pain. He stopped breathing. He remembered how it was to have no breath.

The saxophone brought him all the way back.

*"An' I could shoot you through the heart  
For what you done.  
Now I could shoot you through the heart  
For what you become.  
Cause baby I'm lonesome . . ."*

The club and its music, like Buzzy, were gone . . . like Dale, they had yet to be.

He stood in darkness, his walking stick in one hand, the other resting on a cold doorknob. He was enraged by loss. Everything he and Laura had saved, every penny, he had gambled away and lost forever.



*"Baby, I'm so, so lonesome with you."*

Silk spoke in the night. He stepped forward and heard his gruff old voice coming out meaner than he had ever known it could be.

"I never want to hear that again," he said.

"Luther, you stay away from me now," she said. "I'm not gonna let you hurt me again. I done nothing to you. I know you too well, honey. You been gambling, I know, and I know what you done."

"I ain't," he said, and took another step, and raised his cane in such anger that he brought down all the darkness when he struck.

He heard her cry and his heart broke; but that was the same second she shot him in the chest. He saw it all in one frozen moment, his last. He saw her as the shot lit the little room of rough wooden walls in the house he had built for both of them. She sat weeping on the old slanting bed, weeping and toppling backward with the force of his blow or the recoil of hers. He could never tell just what had happened to her, though he'd had so long to study the white-lit instant that he would never forget it.

The needle came up.

"Laura," he gasped. The phone fell from his hand. He ran into the street. The sounds of traffic were gentle as a river to his deafened ears. He ran uptown, away from the noise.

Instinct guided him through the alleys of a ghetto he was afraid to enter at noon. When he sensed shapes creeping from shadows or legging down from stoops he cried, "You just keep away, bloods, keep away from me tonight cause you won't like me at all, no you won't."

They muttered, "Crazy nigger," and left him alone.

Later, panting, he pleaded with a wall speaker. "I got to see you, Laura."

She buzzed him in and he took the elevator to the fourth floor. Her door was shut. He opened it, the fingers of his free hand clenching on air because he didn't carry a walking stick these days. It was dark inside. That old song was playing:

*"Your love it always comes around,  
It's never any good.  
I know I shouldn't let you in,  
You always say I should.  
Now baby, who can I believe,  
Myself or you?  
Does either of us know  
What's really true?"*

It ended with the saxophone, the sad cry of a golden throat fading into the past.

"You came back," she said. His eyes had adjusted until he could see her on the bed.

"Course I did," he said. "There's never been another for me, honey." He choked but made himself ask, "Did I blind you when I struck you?"

She gasped. "You did remember."

He opened the door a little wider and saw the gun in her hand, the same gun.

"I suppose," he said, closing the door tight, "you might have waited for me all these years. I suppose that's possible. You might just be waiting to get even with me, baby."

"Luther, I already killed you once. Living blind isn't as bad as all that." She chuckled and raised the gun. "It's not loaded. I just wanted you to see it, in case you hadn't remembered yet."

"Can I believe a story like that?"

He took a step across the dark.

She sang, "'You always say I should.'" It was the same voice, gentler than that on the album, but still strong. The same.

He made the last step, took the gun from her hand, and laid it aside.

"I see you still gamble," she said.

"Guess I do. Guess I lied."

He sat and held her tight.

"Thought I'd never see you again," she said, laughing. "That's not funny." But she kept on laughing.

"What is it, Laura?"

"Just remembering you playing that guitar, Luth. You were awful! Never could pick a note to save your soul. I wonder if you'll remember this? It was yours, honey."

In the dim light he saw her lean over the bed and fumble in the densest shadows. Metal snapped and leather creaked. She sat back with her arms full of gold and when he saw what she had he bust up.

A saxophone. ●

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# CLOSE OF NIGHT



by  
Daphne  
Castell

The author, who passed away last summer, had stories published in *New Worlds*, *Venture*, and *Amazing*.

Besides writing science fiction, Ms. Castell raised several children and did radio and newspaper work in Oxford, England. The fine story that follows was inspired by the haunting dark corners of Edinburgh, Scotland.

art: Laura Lakey/Artifaci

It had finished raining by the time they drove through the first suburbs of Edinburgh, and a slate, disconsolate sky yawned hugely over the car, glimmers of sick yellow tearing the clouds to the west. Usually the wedges of Arthur's Seat, truculent slabs massing into view over the tall buildings, cheered Eva. Not this time, however—they seemed withdrawn a little from her, and less clear-edged. She felt uncertain of the city's welcome.

The Pentlands brooded over the coming night; and further north, the gaunt Highland line hunched its shoulders over the grey spears of the retreating rain, which had been chilly, whining, persistent, not easily cleared by a red evening sun.

Eva wanted nothing so much as to get to the hotel, and retreat over dinner from James's tireless, clacking, instructing tongue, which reckoned up business deals over the miles of travel.

They had stayed the night before at Carlisle. Later on this afternoon, the first meeting of the conference would begin, full of introductions and mistrustful back-patting. There was an evening sherry reception, to which wives were invited. "Commanded" would be a more appropriate word. Not for the first time in fifteen years, Eva wondered why she had married a businessman, to become almost a necessary part of an entourage. She had been a social worker, scurrying about desiccated city streets in constant trails of crises, too tired to eat, often; too discouraged by her environment to bother to dress well. Tall and slender, with a mass of floppy, bright brown curls, she looked well when she could trouble herself to search out something that suited her. She had done just that on the evening when she decided to accept the invitation to the party at which she had met James. He was somebody's cousin, up from the country on a family inspection of the girl's lodgings, and invited only by hasty accident.

He was extremely presentable, but quite out of his depth, both in talk and attitudes. She felt sorry for him. He recognized it and was grateful. He invited her to leave the party and have dinner; she accepted, amused at his need to find a social substitute for his instinctive rejection by the party-goers, and somehow the meetings turned into a habit, while he remained in the town.

She had married him within the year, still not knowing quite why. Something to do with his more vulnerable spots, his need of a listening wife—his delightful manners played a part in it, too. She found herself honestly charmed by the habits of a man who always opened a car door, or any other door, for her, who pulled her chair back, helped her off with her coat. It was later on in their married life, and after they had discovered that they

could not have children, that she also found out that charming manners cannot replace absorption—the absorption that stems from genuine concern with another, and intense interest in that being's every thought, movement, or action. She had had lovers, and if James had known of them, he had never said anything. But she had never found another person who looked into her face and watched her soul looking back at him, and waited for it to explain itself in speech and deed.

Perhaps there weren't many of them. Wealth formed a good cushion, she enjoyed travelling, and they travelled a great deal and in comfort.

She could concern herself with housework or not, as she pleased, for there was plenty of money to hire servants; she could work, if she wanted, voluntary, charitable work—as long as she was available to be presented as James's assured token of marital success and security.

She was a great deal better off than many wives. She was also bored, discontented, unhappy, and a little frightened.

"I know you're tired," said James. He prided himself, perhaps rather pathetically, on his perceptiveness. But who wouldn't be tired, after three hundred miles?

Eva shrugged, and regretted it—her neck ached badly, a series of sad, tenuous threads of pain that wound their way up into her brain.

"I think I'm probably hungry. I always feel like eating a lot when I'm in Edinburgh."

"Good food here, particularly the bakeries," agreed James. But Eva sometimes felt uneasily that it was because there had been so much hunger here in the past—whenever she entered the city, it was as if old odors called her to recognize them and include them with her own feelings. Odors of fear and hunger and sly passion without fulfillment and cruelty and blank incomprehension. She knew too much of the history of the place; she thought of no one famous or infamous individual—John Knox, Brodie, Queen Margaret—but of a nameless buzzing tumult of little people who had watched and suffered from the wings, while the great players strode and plotted and bargained.

"Walk-on parts," she said aloud, and James turned to look at her with concern.

"Having hallucinations, darling?" He chose jocularly rather than anxiety, and certainly he was perceptive about what irritated her. She smiled back, and he drew the car to a halt in one of the side streets. The Argonne was one of the better small hotels,

but not the best. This meant that at off-peak seasons they often had it nearly to themselves, and the excellent, unobtrusive care of the proprietor and his wife, John and Ellen Dobree, was centered mostly on her while James was at meetings. She liked these journeys for no other reason than that she was lightly spoiled by a couple who knew nothing about her, but had been trained, and had practiced to give as much attention to guests as the guests themselves desired. She liked, too, the well-bred, shabby, dark furniture, and the unostentatious but plentiful comfort of the hangings and carpets. The walls were exceedingly thick, and it was very quiet, although the city center was quite close.

The food was excellent, as the best English home cooking can be, with recipes handed down over a dozen generations. There were not many Scottish dishes, but always superb bread, cakes, and oatcakes, and the best fish she had ever eaten.

There was time for a very hurried tea before James went off to his five o'clock session of introductions. She was to join him at the Great Britain at about half-past six—she was glad he had not booked them into the conference's main hotel. It would have meant more of the normal, rather tedious, social chores of joining women without common interests for coffee and shopping.

She unpacked efficiently, chose a green silk dress with a high curly neckline lined with peach, changed, and decided to walk into town, rather than catch a bus or call a taxi. Her shoes were not entirely practical for the purpose, glossy bronze with small thin heels, but they were comfortable enough, and it wasn't cold.

She arrived on the North Bridge with enough time to spare to look around her for a little while; she decided to visit St. Giles' Cathedral, and absorb darkness and grave silence for a while, before being thrust into the over-lighted, high-pitched gaiety of the sherry party.

The Cathedral was nearly empty, and she sat at the back, trying not to think, and above all, not to hear the sound of the car's remorseless engine, which was always so hard to get out of one's head after a long journey.

She thought someone whispered to her, and brushed her elbow, but turning she saw that her nearest neighbor was not only wrapt in silent prayer, but many yards away. She read the notices near her—an organ recital, a string quartet from London, an appeal for those interested to take part in street theatre on the church's behalf. She noted the day of that, and thought that she might find an opportunity to watch it. She became aware that someone was watching her, and turned, half-smiling, to anticipate a remark

from some friendly stranger—one of the vergers, perhaps. Did they call them vergers here? She must find out. Irritated and confused, she found that she had made that most familiar of mistakes—a dark old clothes-press, standing upright in a corner, had seemed to her, with her shoulder turned, to be leaning towards her like a human being.

There was a small metal plate set into the wall by her, and she read that, too. Jhonet Cowrey, it said, 1678, and nothing else. The clothes-press looked old enough to have belonged to one Jhonet Cowrey, too, though it was undoubtedly used for vestments, now.

A door creaked, and she saw the woman she had thought deep in prayer was slipping out of the Cathedral. A deep ray of light struck a tangle of red-gold curls above her neck, and the hand-woven cloth that hid the rest of her hair was a warm blending of purple and green, soft and blurred, like wet heather.

Eva thought it beautiful, and determined to try to buy one like it in one of the smaller, more expensive shops. It would not be anything like so attractive in a cheap make. Probably Princes Street would be better than the Royal Mile. She would ask Ellen Dobree.

As she rose to leave, an odd moment of half-suffocation overtook her, and for a moment she felt the Cathedral close its walls around her, with singing, and a rose and gold haze of bright candles, and a press of dark garments and dropped heads smelling of hurry and unwashed human flesh. It was as if her knowledge and her imagination had temporarily worked together to cast her back into some earlier time, when the life of mankind was the life of the church, and without the church there was not any authority or law or comfort.

The Royal Mile was almost as dark as the Cathedral had been, for a whole strip of street-lighting had failed, and she quickened her step, partly through nervousness, and partly because she had lost a few minutes during her dizziness in the Cathedral.

It was while she was passing the entry to a small dark flight of steps, quite close to a wine-bar she had often visited with James, that she heard a voice and this time certainly a touch on her elbow.

"Ye're late out," said a boy's voice, and a lad of about twelve went past her, turning to smile (but his face was half-hidden), and disappeared down the steps. She had not thought children so badly clothed still lived in Edinburgh—he was out at elbows, and, she was almost sure, bare-footed. She had seen the marks of some

great burns on his hands as he moved—he must have scorched himself badly at home or school.

"I'll soon be indoors," she called after him, but he had gone. Moved by curiosity, she went down the steps a little way, and looked into the close where the boy had vanished.

She could not see very much, only enough to tell her that it was one of the unrestored old closes, not like the cleaned, renewed stone of Lady Stair's House, but dank and slimed, with pools between filthy cobbles, and strings of washing hanging high between the rooms.

There were obviously people in the houses, for many lights showed, and there was a smell of fish cooking, and whispers from a doorway, perhaps from a courting couple. Eva shuddered fastidiously at the thought of anyone sitting or lying on such stones. There was one single lamp in the close, tall and beckoning, like an iron lily. It shone with no warmth, but its light was singularly powerful, and lay in puddles of yellow beneath it.

As she turned back to go up the steps again, she felt her gaze drawn upwards, and found it met by a grossly fat old man who was sitting motionless in a bare window embrasure. He wore nothing on his arms—some kind of filthy white sleeveless shirt covered his bloated belly—and she could not tell whether he could see her. His eyes were white-blue, filmed all over with what might have been cataracts. It was like some obscene parody of the balcony scene from *Romeo and Juliet*, and she leant sickly against the damp wall, for the dizziness had come over her mind again.

In the whitewash, scored deeply in black, near her hand, she saw letters:

*Morag—gudewife—spaewife*

and then much further down, large and hastily written:

*Nae wife*

She went out, wondering what the unknown Morag had done to attract praise and criticism of such different kinds on the same piece of wall. A strange place, Edinburgh—some of the stories were so well-known, and some so hidden. Had Jhonet Cowrey, perhaps, known a Morag? It was a common enough name. That was nonsense, though—they need not have lived at anything like the same time.

When she arrived at the Great Britain, the party had already overflowed from the conference suite, and slopped into the bars. She could see James almost immediately, holding a drink, with another by his side on the table, and talking earnestly to a fat woman with too much make-up. He looked anxious and irritated,



and his eyes constantly left her to roam round the room, and then returned to pay painful attention. So this must be somebody powerful and important, and undoubtedly he had asked her to meet his wife who would soon be here, and was already wondering how to explain her lateness. Eva felt annoyed, but contrite—this was what she disliked so much about James and his business—her part-accountability for so many things.

She went and made her apologies, and was astonished to discover that she had somehow lost another fifteen minutes—she was now nearly half-an-hour late for the sherry party, and James was obviously exasperated, if worried. He introduced her to Mrs Ferolstein, and was rather obviously careful not to ask her what she had been doing, and how she had taken so long doing it.

Mrs Ferolstein proved unexpectedly pleasant and perceptive. Whatever business connections, she was a devoted live-in lover, as the dailies would have it, of Edinburgh.

"You were enjoying your little trek round the streets, were you?" she asked, in a soft rich voice, warmed with small Scottish inflections. "I never tire of her myself, the mysterious old lady of a town that she is!"

Eva smiled briefly, thinking of the night and the unexpected, unwelcome appearances.

"It's intriguing . . . I won't say I enjoyed it. I was lost for a while," she ended, looking apologetically at James, who merely shrugged, exasperated, before he set off to get them all another drink, and some canapés.

Over dinner, Mrs Ferolstein talked to her on one side about the historic glories of Edinburgh, and James lectured on the other about the dangers of getting lost in the dark and menace of the old town.

Eva had a sudden thought. "Mrs Ferolstein, do you know anything about the plates set into the walls of the cathedral?" she asked, ignoring one of James's more vivid descriptions of a recent court case concerning a late woman walker and a mugger.

Mrs Ferolstein appeared to have an encyclopedic knowledge of the antiquities of St. Giles' Cathedral.

"Oh, Jhonet Cowrey!" she exclaimed, when Eva had enlightened her. "Poor woman!"—as if she were talking about some distant and unfortunate relative—"Yes, they put her on trial for her husband's death—it seems she'd been worried about his health, and lack of—lack of energy," said Mrs Ferolstein delicately, "and she'd apparently asked for help from some woman in the neighborhood who had the reputation of being able to help in odd mat-

ters like this . . . some kind of a white witch, you may say. It was quite a celebrated case in the seventeenth century. The wretched man died, and of course, if you know the kind of thing that the herbal leeches of the day thought good for a complaint of that kind, you wouldn't wonder. There was some doubt, because she came from a good family, though they were poor, and everyone knew she was fond of him—naturally, or she wouldn't have been asking for the remedy. Nevertheless, they hanged poor Jhonet—the neighborhood woman was never known. I daresay there were a good many people who wanted to help Jhonet. She was well liked. But no one would risk their necks or the enmity of the medical-lady busybody who had put a good man into the next world out of kindness of heart, and out of a desire to save his wife from seeking consolation from someone more potent. So no one opened a mouth in the wrong place—after all, they might have had a need of their own one day, and a good spaewife is not all that easy to come by."

"Spaewife?" Eva mused "I've heard it before—a fortune telling woman or something of the kind. Would she deal in herbs and potions too?"

"Oh, for sure! And no doubt she would give a bit of good counsel, and along with a few charms, she'd explain to the nagging wife how to use the right words to her husband, or the timid young girl how to find confidence and make the best of herself for the boys."

Eva laughed. "A sort of primitive social worker-cum-psych too, then? Apart from the herbs and charms I've had to do some of that sort of talking in my time."

"Oh, were you a social worker, then?" Mrs Ferolstein's bright black eyes snapped with curiosity, and the talk turned to the rights or wrongs of the welfare state, and the ability of families in more ancient times to stand on their own feet, as compared with their acquired modern skill in knowing exactly what state body could be most easily called upon. "It's all a matter of survival," insisted Mrs Ferolstein, "only they have different tools and weapons now. They used to survive at all costs, on Nature's whim or bounty, or on their own sheer hard work. Now—" she shrugged off the indigent masses.

Before they left, however, Eva said, "It still seems odd that there should be a memorial in the cathedral—how could that happen if she was actually hanged? Surely—"

"Her family was a good one, as I've said. They couldn't prevail upon the authorities of the kirk to let her be buried in consecrated

ground. But the family waited, with its long memories, until most of the elders were dead, and the cause of Jhonet's posthumous banishment nigh forgotten. Then they asked for the plate, and gave a generous sum with it, for the rest of the souls of the poor of St. Giles. Nobody seems to have raised even the slightest demur. The date on the plate had to be the one that the rector allowed them to place it there—none of them wished to commemorate the day of her hanging. That might have been a bit too obvious, even for a church grown more easy-going. So the metal in the Cathedral may well be the only resting place her poor forgotten soul has to cling to."

As they walked down to the car, parked in a back street not far from Holyrood Palace, Janet pointed out the close to James. At least, she tried to—she was not absolutely sure, among the many, but she thought she remembered the marks on the walls nearby, and the colours of the paving stones and the patterns of the cobbles. A drift of seagulls rose up over their heads as they peered closely together through the iron trellis-work that someone had drawn across the entrance.

Eva had not realized that entrances like this might be closed off at night—James said that it didn't usually happen.

"The place looks derelict to me," he remarked. "I should think they're rebuilding it—they're doing that with many of the really old places. Extraordinary to think they used to be the lodgings of large and noble families—ugh, look at that!"

Eva had seen nothing.

"A rat," James informed her, moving distastefully away from the wall, "slipping along through the refuse as if it owned the place. There's no one there, you know. Most of the windows are broken or boarded up. I doubt if you really saw any inhabitants. There could be some still left, I suppose. But it's pretty unlikely."

Eva still saw vividly the gross white old man and his statue-like corpulence—a pallid Buddha—and heard the whispers and rustles and giggles, perhaps of lovers. But it was with the eyes of her mind, and she took James' arm obediently, and left the stairs to darkness and the night wind.

As they turned into the street in which the car was parked, a woman brushed against Eva's shoulder. She stopped, and James, irritated, stopped with her.

A pale, wrinkled face looked back at her, the patient smile on it belonging to someone who was not old, but wrung through by years of trial and near-hunger, and a whisper dropped through the rising mists, as the woman went up to the higher part of the

road: "She said to come by tomorrow or the night after. He's no just so weel—and my own bairns, if ye can. They're but poorly."

"What on earth was all that about?" asked James, and Eva could not answer, although she felt already that she might know something more than her mind would bring to the surface.

"Must have mistaken you for someone local," James answered himself. "One of the panel doctors, perhaps."

"Doctors aren't the answer to every difficulty," said Eva, unaccountably annoyed.

"What an extraordinary thing to say!" James' eyebrows arched in some displeasure. "I never suggested that they were. Aren't you rather touchy this evening, Eva? And that was an odd time to arrive at a function that you knew very well was important to me. Mrs Ferolstein's a very powerful and a very intelligent lady—fortunately she seemed to take rather a fancy to you."

Eva snapped, "And you find that odd?"

James sighed. "There you go again—and once more, I never suggested that. No, my dear, you do have an air of quiet self-sufficient competence sometimes. That would attract her attention. She likes people who can do things—solve problems, for instance. Perhaps it's because you used to do exactly that so much, at one time. She likes answers, without uneven ends hanging out."

"But I didn't know I gave that impression!" Eva laughed ruefully. "It's probably because I often feel lost in the kind of conversation your people have. So I sit quietly. Perhaps they mistake that for enigmatic knowledge. They must be rather stupid if they do."

"My kind of people," said James stiffly, "don't converse in such widely different terms from the rest of humanity. They go to plays and concerts, sometimes, like other people. Sometimes they even make jokes. It's simply that when they are engrossed in professionalism, they find it absorbing to the exclusion of everything else."

"Obviously." Eva's tone was slightly waspish, and they drove home to the hotel in a rather sulky silence.

James elected to have a whisky and ginger at the small hotel bar, which kept open till the most uncanny hours, and Eva cornered Ellen, who had been helping her husband serve, but was now quietly putting empty bottles in a basket, with one tired eye on the clock. Ellen at first professed no knowledge of the close which Eva had visited; but after a brief description of the shops in her neighborhood, some light dawned in her eyes.

"Oh, that's the Stirk Close—it was Butcher's Wynd, but there's a tale that one of the animals got loose from the slaughterer's, this'll be many years back, and rampaged round and got into the close, and couldn't get back up the stairs again. So round and round he goes, until he's tramped two-three bairns nigh to death. My, that was aye an unlucky place. My granny lived on the opposite side from them, at the start of this century, and she used to tell us about the sheer black fortune that seemed to hang on those folks' sleeve, and had for more years than any of them could remember. If it was hunger, there was always more there that were starving than anywhere else. If it was the sickness, they'd be down in droves. When it was bitter in the rest of the city, it was the Stirk Close that had snow piled up so they could barely get out, and there it stayed freezing, till it was gone from everywhere else. Some trick of the wind, maybe, that brought in the dust and the germs and the frost. But once people left the place, they vowed never to go back, and they always found themselves better off elsewhere."

"I know," Eva found herself suddenly thinking of some of the past families she had thought of as "hers," with the sheer aching pity she had always had for those who, bewildered, never did well, and could never seem to get the knack of it, somehow. There was always the next court-case or the next filthy disease, or the next bastard—they could never get clear of it, and they could never get away from their background. Call it what you would, unwillingness, lack of caring, inability to cope, the desire to yield, she had never been able to believe that it was entirely the fault of "her" families.

"Some of them said it was like a curse on it, my granny told me," said Ellen cheerfully enough, tipping up a bottle in which a tiny dram of cherry brandy remained, and licking it off her finger.

A full bluish moon had risen, and was edging the velvet curtains of the bar with watered silver. Eva looked from the warmth and smoky orange comfort of the small lamp-lit room to the austere fields of the sky, ridden by steely cloud bands, and felt a sudden yearning to be out in the night, breathing cold air.

James was affronted and astonished. "But where are you going? You won't walk, will you? It would be stupid."

"Just a quick turn in the car, round the road at the foot of Arthur's Seat, maybe as far as the water, and then quickly back," lied Eva.

"D'you want me—?" James persisted.

"No, no!" cried Eva, in almost hysterical impatience, as if someone was waiting for her who might soon be gone. She ran out of the hotel, fingering the car keys impatiently, and ducked into the driver's seat with a sigh of relief, while James stood on the steps, gazing at her with bewilderment.

As soon as she was moving, she felt a calm move into her excited veins, soothing down the blood that had been flowing at too hot a pace.

She drove rather slowly, knowing and savoring where she was bound, not the place so much as the adventure of assailing it by moonlight. The idea gave her short tremors of intense excitement at the pit of her belly, like the shivers that had shot through the depth of her being, sometimes, when she had looked down over high walls, and not quite been able to contain an unreasonable fear, yet longing, at the deep well of air and space that could so easily pull down her falling body.

The street was almost deserted as she drove down the steep slope, jouncing over the cobbles. Certainly the police would not trouble her, if she stopped just for a short while to see how the moon fell on the horrible place where so many of the poor had mourned and suffered, and asked vainly for help. But perhaps not always vainly—for there had been someone, had there not? Someone who cared, someone who was interested, who had tried to help Jhonet, even if it had been in error? The spaewife?

She stood by the steps, looking in and down, and, to her surprise, the gate had gone, the iron fretwork no longer interfered between her and what she looked for.

The stones were washed by the moon, and looked paler, and leprous, with trails as if slugs had been climbing them. But the windows, like wide open orange and yellow eyes looked at her, fully alive and clustered with people. She could almost see what some of them were doing—washing, putting children to bed, poring over pots or clothes and, in one window, a great old book with brass on its back and corners. There was faint noise, too, quarreling and crying, and fat gouts of obscene laughter from one room where a whore fondled a customer.

But it was the streetlamp that took her eye. It drowned out the moon, blooming yellow as a giant, stalked lemon stuck out in the middle of the close, a wrecking beacon for the dazzled eyes.

Its peaked head stood out belligerently, and round its foot was a magic circle of sharp-edged light, defined territory where nothing could creep or move, outside which there was indecision, chaos, dirt, and sickness. Inside that circle, felt Eva, order and

action functioned effectively and hygienically, like the functioning within the lights of a surgical ward.

The night closed off her excitement, and she felt suddenly sick and drowsy. She heard the voices, and they seemed to have some relationship to her, and to what she was feeling; but she turned from them and the lamp, and went back to the car.

"What are you doing with yourself today?" asked James at breakfast. The morning was clear and lovely, and sun gilded the caps of the small autumn flowers in Ellen's neat garden.

Eva liked the autumn versions of plants that bloomed more opulently in the hot weather. They showed restraint and a vivacious economy, like poor Frenchwomen attempting chic on small budgets. And the leaves smelt more spicy, especially the chrysanthemums. There was a brisk, herbal, curative effect about an autumn garden.

Ellen brought more oatcakes and smiled at them. "Good weather for a picnic, now—they say Cramond is lovely just now, and the wind not cold yet at all."

"It's an idea," said James, "you'll weary of the city if you stay in it all the time." Eva thought not; but she could see the sense of a trip to Cramond, as a time-waster. Did she really want a time-waster? She had an urgent sense of pressing hurry in her chest, as if there were something she had left undone, and that really ought to be done quickly. It affected her breathing, too, and she felt as if the fresh sea-wind off the harbor at Cramond might help her to relax and breathe more smoothly.

"The zoo's out in the same direction," said James doubtfully, "Isn't it? I suppose you won't want to—" he stopped. Eva was shaking her head, as he knew she might. She did not care for restraints for human beings or animals, even if they knew no better. Freedom ought always to be an option, even if it were only to be refused.

Ellen put her up a picnic: cake, and a couple of bridies, the pasties she liked so well, and fruit, and she bought herself a can of lager, and drove out towards the harbor. It was as she struggled with the twists of road and traffic at the bottom of Princes Street, that she caught a glimpse of red-gold hair, curling under a kerchief, and saw a pair of hands stretched out beseechingly towards her, and the anxious profile of a woman's face, and knew that she could not go out of the city that day.

James would not be home until late, and there was no party or reception, but she knew of other things she could do.

She was not needed just yet, but she must be within reach; it

was a long time since she had planned her day to be within earshot, or telephone call, or walking distance of someone in just that way. Or on call? It was, again, a long time since she had heard or used that phrase. But she could go shopping for a while. At least part of the day was free to her; and nightfall was not yet.

The day passed remarkably quickly, as if it had simply hovered near her, and then been withdrawn. She bought a head-scarf of nearly the weave she had already seen twice, and ate her lunch in the gardens below the Scott Memorial; she watched the patient-queue to ascend it, and the fuzz of black dots at the top that were heads peering over, and she listened to a band.

She went into the gallery and looked at pictures, she visited the Camera Obscura and saw grey, dizzying windswept scenes, a panorama of half-real towers and houses; but she did not go near the Royal Mile. The time for that would soon be near, and she wished to feel the waiting and the excitement.

An elderly woman talked to her for quite a long time about the difficulties she was having with the nephew who lived with her—the illogicalities and thoughtlessness of the young, and the expense of having to feed them; and Eva answered so politely and sensibly that no one would have guessed that she heard hardly anything of what was said.

At last the sun sank, and grape-dark shadows bloomed in doorways, and thin mists began twining up from the long dank grass on the castle slopes, and stars pricked luminous patches in the evening sky, and Eva rose and stretched herself, from the bench she had been sitting on, and began to walk towards her close.

There were more houses than she remembered, and in better repair, and she missed the women carrying water, and the cries of the street-sellers, but she was content to be going back to the tasks she had to do, and to the people who needed her, every one.

She paused in the entry, and rubbed her hand lovingly over the inscription: 'gudewife—spaewife'; they had loved her, that had scrawled that over the stone. And never mind the spite of yon man whom she would not have in wedlock! She had better things to do with her time than to marry—look where it had led poor Jhonet. The healing gift was the greatest honor, and the greatest burden a woman could carry, whether it were of body or spirit.

The windows shone their usual homely good cheer to her, and she could hear the whispers of young Nan lying with her Willie, in the darkest patch, where the shadows were thickest. And what that child's clothing would be like the morrow, dear only knew!



The only man who saw her come in was old Master Wattie, who had been the best of all tailors, until he lost the use of his hand—she could help with the pain, but not the loss of movement. He inclined his head to her, and she knew others would soon hear of her coming home—those whose bairns were sick of the wasting disease, or the men whose warts and blains were made worse by their work in the mills, or the girls who wanted a love-spell, or something that would just disfigure a rival, not too badly, for a wee while. So, before she took up her abode again, behind one of those welcoming windows, she must sit at her old spot, and ply her old trade, and take care of their lives, for those that could not care for themselves.

The lamp pulled her, as it always did, into the safety of its covering glow, and all the faces came silently to the windows and watched her, as she sat down inside its limits, held safely and bound within the bourne and path of its globe; while outside the chatter and clutter of some other world, with which she had no longer anything to do, passed on and away from her. ●

MARTIN GARDNER

(from page 38)

## SECOND SOLUTION TO TECHNOLOGY ON VZIGS

The cipher consists of identifying A with Z, B with Y, C with X, and so on, taking the alphabet in reverse alphabetical order. VZIGS decodes as EARTH, and HFM as SUN.

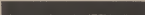
So far as I am aware, a totally unexplored region of word play is the finding of common words that translate, using this reverse alphabet cipher, into other familiar words. Indeed, I have been able to find only a few short examples—TOLD to GLOW, for instance—and would enjoy hearing from any reader who can supply longer ones. It might even be possible, though surely not easy, to construct sentences that translate into other sentences.

For the solution to last month's cryptarithm, turn to page 109.



# SALVAGE

by Jane Yolen

  
The author's 70th book, *Tales of Wonder*, has just been published. She teaches at Smith College, and is the mother of three teens. "Salvage" is her first story to appear in *Asfm*, but we hope to see more.

art: Theresa Paulina Florenza

The old poet lay in the bow of his ship, dying of space sickness and homesickness and a touch of alien flu. There was nothing to be done for him but to make him comfortable, which meant listening to his ramblings and filling his arm with a strange liquid from his own stores. He had been the only one left alive in the ship when we found it and at first we had thought him dead, too. Only at my touch, he had roused up, pointed a stalk at us, and recited in a bardic chant some alien click-clacks that, run through the translator, turned out to be a spell against goblins and ghoulies and things that go bump in the night.

Whatever night is.

*Ghoulies* was his name for us.

He had immediately fallen back into a deep sleep from which he roused periodically to harangue whoever had a free moment, calling us *worms* and *devils* and *satan's spawn*. Most of us decided to leave his mouthings untranslated since what spewed out of the machine made little sense and we had not time to properly salvage it. The boxes, after all, were not yet full.

But one of the younglings, a two-year named Necros 29, chose to sit with the poet-traveler and translate his every word. Necros 29 called it salvage, but I wondered. He comes from a family of puzzlers, though, and they are slow to mature and mate. It may be that that side of the line runs true, for it was he who first understood that the creature was a poet, or at least a speaker-of-

poems. It was soon clear that the alien did not make up his poems as would any true poet, but rather carried the words of others in his head. Disgusting thought, a crime against nature, this salvage of the mind. If we saved up all our poems, our heads would soon be so crowded with them there would be no room left for savoring new ones. What a strange race we had come upon, whose equipment is new and whose thoughts are so borrowed and old.

But Necros, being a puzzler, kept at his task while we scavenged the ship thoroughly. It was full of salvage and the bones of the poet's companions were especially fine.

"He calls upon the names of many gods," commented Necros to me during report, "and that is fine for a poet. But he also says many not-found things."

"Such as?" I asked. My great-great-grandsire, Mordos Prime, had been a puzzler on his matriarchal side, though my mother denies it when asked. Occasionally I am drawn to such things, though basically I am of a solider nature.

"He speaks of night, a darkness that ends and comes again."

I passed the bones through my mouth and into the salvage sack before I spoke. They were, as I have said, very fine indeed. As the sack's teeth ground the bones into dust, I said, "Is night then a birthing cave? Is it the winking of far stars against the Oneness of space?"

Many who heard me laughed, their sections wiggling greatly with their amusement.

Necros shook his head and his eyestalks trembled. "I do not think so. But I will listen to him further. I think there may be some strong salvage in his thoughts."

"Pah, it is worthless stuff," remarked my old mate, the long cylinder of his head shaking. His salvage sack was full and grinding away, and the rolling action of it under his belly excited me. But now was the time of work, not pleasure. The boxes were not yet full and it would be days more of grinding before our organs descended enough to touch.

I went back across the boarding platform that linked the silent ship to ours. I emptied my sack of the fine silt, spreading it thinly over the mating box. Days? It would be weeks if we did not fill the boxes faster. As Prime of this ship it was my duty to direct young Necros away from the live poet to the dead and salvageable parts. It is all very well to salvage a culture when the boxes are full, but—and I remembered my old mate's rolling sack—there is an order, after all, and poetry would have to wait.

Mouthing a small lump of unground bone out of the box, I

swallowed it again. Then I turned back and crossed over the platform to the alien ship.

"Necros!" I called out as I crawled. "Come. I would talk with you."

He came at once though with a slight reluctance on his face, his stalks drooping and his first section slightly faded. I think he already knew what I had to say.

"The boxes are thin," I said. "There is no time for him." I gestured with a stalk towards the alien who raised on one side and was babbling again.

"Fe-fi-fo-fum," spewed the translator. Nonsense in any language is still nonsense. "Be he live or be he dead, I'll grind his bones to make my bread."

"What in the universe is bread?" I asked.

Necros touched me, mouth to mouth, then raised his chin, showing me his neck section, the fine lumps of his heart beating a rhythm through the translucent skin. He could not have been more subservient.

"I will work long into the third work period," he said. "Do you not see that it is such things—bread, night, seasons—that we must salvage from him. *Only with salvage*," he reminded me, "*is growth*."

I thought of the silty boxes where we would soon lie down and mate, starting the next generation wiggling through our bodies and out our mouths. "Yes," I said at last, "you are right this time. But still you will have to work the extra period to make up for it."

He quivered sectionally and scurried back to the alien. At his touch, the alien fainted, though I suspected that he would revive again soon.

Necros 29 kept his word. He worked the extra load, and so much salvage quickened him. He entered maturity early yet lost none of the enthusiasm of a youngling. It was delightful to see.

Once he came to me wriggling with joy. "I have come to something new," he said. "Something not-found which is now found. It is called *haiku*." He savored the word and gave it directly into my mouth.

I let the word slide down slowly, section by section, to my sack and the slow grinding began. Then it stopped. "I do not comprehend this word, *haiku*," I said. "It means no more than his fe-fi's."

Necros shivered deliciously. "It is a poem that is worked in sections," he said.

"A poem in sections?" It was a new idea—and quite fine.

"There are seventeen sections broken into bodies of five-seven-five. And there are rules."

"That is the first your poet has shown that he understands order," I said thoughtfully. "Perhaps I was right to let you salvage him."

Necros nodded, showing his neck section for good measure. "These are the rules. First the poem must rouse emotion."

"Well, of course. Any youngling knows that." I turned partly away from him, to show my displeasure.

"Wait, there is more. Second, the poem must show spiritual insight." He nodded his head and his sections moved like a wave, enticing.

"Still, that is not new."

Necros drew out the last. "And finally there must be some use of the seasons."

"Fe-fi's again."

"I am comprehending that piece of alienness slowly. Digestion is difficult. The grinding continues."

"Perhaps," I replied coolly, "it should not continue."

"But I am working triple," Necros said, twisting his head back in such alarm that the lumps of heart were pounding madly in front of my mouth. "And we have salvaged all but the ship's shell and the room where the poet lies." His voice was strained by his effort to show me his chin.

"It is true that the boxes grow full and my desires descend," I admitted. "How long will this salvage take?"

He shrugged. "The poet's voice weakens. He speaks again and again of *the night*." He dared to lower his chin. "*Night* is, I am beginning to think, the ultimate alien season. Perhaps I will comprehend it soon."

"Perhaps you will," I said, turning without giving him any promises.

The next work section I was sleeping, with my body pressed along the sleek gray ship's side, dreaming of mating. I had grown so much with the salvage that I was now nearly half the length of the alien vessel, and my movements were slow.

Necros found me there and quivered in all his sections. I heard a deep grinding in his sack which he coyly kept from my sight.

"The poet is dead," he said, "and I have salvaged him. But before he died, I made up one of his own strange poems and sang it into the translator. He liked it. Listen, I too think it quite fine."

We all stopped our work to listen, raising our chins slightly. To listen well is of the highest priority. It is how one acknowledges order.

Necros recited:

*The old poet fades,  
Transfigured into the night,  
Not-true becomes true.*

What do you think? Does it capture the alien? Is it true salvage?"

A small one-year shook his head. "I still do not know what *night* is."

"Look out beyond the ship," said Necros. "What is it you see?"

"I see our great Oneness."

Necros nodded, letting ripples of pleasure run the entire length of his body. "Yes, that is what I thought, too. But I comprehend it is what he, the alien, would call *night*."

I smiled. "Then your poem should have said: *Transfigured into Oneness*."

Necros shivered deliciously and his sack began its melodious grinding again. "But they are the same, Oneness/Night. So Not-true becomes True. Surely you see that. Truly it is written that: *With salvage all becomes One*."

And indeed, finally, we all comprehended. It was fine salvage. The best. The hollow ship rang with our grinding.

"You shall share my box this section," I said.

But so full of his triumph, Necros did not at first realize the great honor I had bestowed upon him. He chattered away. "Next time I must try to use all the alien seasons in a poem. *Seasons*. I must think more about the word and digest it again, for I am not at all sure what it means. It has sections, though, like a beautiful body." And he blushed and looked at me. "They are called Winter, Spring, Summer, Fall."

I ran them into my mouth and agreed. "They are indeed meaty," I said. "Next time we meet such aliens we will all salvage their poems." Then I spoke the haiku back to him, once quickly before it was forgotten: .

*The old poet fades,  
Transfigured into the night.  
Not-true becomes true.*

Smiling, I led the way back across the platform to the boxes, leaving the one-years who were not yet ready to mate to finish salvaging the ship's hull. ●



# STILL LIFE WITH SCORPION

by Scott Baker

art: Nick Jainschigg

The author's latest novel, *Nightchild*, has recently been released in paperback by Timescape books.

He is currently at work on a series of novels, and his short story, "The Lurking Duck," appeared in the

December 1983 issue of *Omni*.

This is his first appearance in *Asfm*.



The dust in the back of the open truck was as bad as ever, but the desert was getting a little greener-looking, with squat gray-green bushes scattered here and there among the twisted, bare-branched, black thorn-trees. The truck lurched violently as they hit a hole, and the scarf Randy had tied inexpertly over his nose and mouth came loose just as he inhaled. He coughed, nose and throat coated with the thick hot red dust, and decided it was time to drink a little more water. He found his plastic canteen, took a cautious sip, swallowed and took another.

Looking up, he caught Cora watching him—the seats faced inward so she more or less *had* to look at him if she didn't want to strain her neck looking back over her shoulder all the time—and he held the canteen out to her. She shook her head and turned away, still not speaking to him.

On impulse he offered the canteen to the wizened little old man sitting next to him with his thick plastic raincoat buttoned to the neck.

"No, thank you." A thin, querulous voice, the kind of old man who enjoyed disciplining his grandchildren with a cane. "I spent twenty years in Africa—Egypt, not here—and you won't see me drinking that sort of water. I have three cups of tea with my breakfast, then nothing more until lunch, when I . . ."

Randy tuned him out and put the canteen back behind his seat. They were jolting across a dry gravel riverbed; about a hundred yards off to the right he could see a group of Samburu warriors in orange-red, toga-like robes watching their scrawny hump-backed cattle. Cora and half the other passengers waved happily at them. With the camera he wore slung openly on its shoulder strap, Randy got a good picture of them making condescending fools of themselves.

The truck labored up out of the riverbed and rounded a hill. Just ahead, the other truck was stopped by the side of the road with one of its middle wheels off. The Kikuyu driver was removing the brake drum while one of his passengers—the short man with the Jungle Jim safari outfit and the garage in Brighton—was giving him advice that he didn't need and wasn't listening to. The White Man's Burden.

One of the cooks had already set up the picnic table with its meat loaf and mango chutney sandwiches while the other two were dragging out the water cans and bottles of orange crush syrup. Nearby, a bare-breasted Samburu girl of fifteen or sixteen, with her neck and shoulders heaped with bright, beaded necklaces and collars, stood surrounded by her goats, watching the tourists

as she chewed on a twig of the wood they used instead of toothbrushes.

Randy's truck stopped alongside the other as William, the engineer from Mombassa who looked like a bearded British Mephistopheles, started bargaining with the girl for a picture. She wanted fifty shillings; he was offering ten. Randy stood up and with a casual, practiced motion got a picture of the two of them with the camera concealed in the inconspicuous leather case he wore on his belt, where none of the Africans he'd photographed had yet noticed it.

"That's not fair," the nurse sitting by Cora said.

"Why not? As long as they don't know, what difference does it make? I'm not hurting them or anything."

"Some of them—I can't remember which ones, maybe it was the Masai—anyway, they think if you take somebody's picture you're stealing his soul. This is their country; you should respect their beliefs."

Cora was looking away, pretending to watch the Englishman bargaining with the girl, but Randy knew she was listening: She'd uncovered her face and he could tell from the tight, disapproving line of her lips.

"But the Masai let you take their picture anyway," Randy said, forcing himself to answer patiently. Cora had said almost exactly the same thing; if he could convince the nurse, it might help convince her. "as long as you're willing to pay them enough for it. So their souls can't really be worth all that much to them—and anyway, after the first picture somebody takes, they don't have any souls left to steal, right? So from then on they're cheating you."

"But they're so poor here. That's all they have to sell."

Randy shrugged. "They can still sell it to someone else after I'm done. Or at the same time, even. They're not losing anything."

"Maybe, but—"

One of the middle-aged women from the other truck shrieked and the nurse broke off in mid-sentence. The stocky German in the torn T-shirt was down on his hands and knees chasing a three-inch scorpion, one of the lethal black and yellow kind, under the picnic table and back out through the rapidly scattering group of women. Randy got two pictures of the confusion with the shoulder-strap camera, then ran out of film. He jumped down from the truck and managed to get a picture with his belt camera just as the German clapped his killing jar over the scorpion.

The scorpion writhed and snapped inside, arching its back to

strike the jar repeatedly with its barbed tail and leaving a few drops of yellowish fluid on the glass each time, before the acetone fumes overcame it and it died.

By now everybody else was a good ways away from the picnic table. The German dumped the dead scorpion out onto the table, beside the heaped sandwiches, admired it an instant longer, then nonchalantly picked it up and injected it with glycerine from a hypodermic he carried in what looked like a doctor's little black bag.

Randy used his belt camera to get another two pictures of the German with his prize and a few of the crowd clustered around looking on—the Samburu girl as fascinated as the rest—before Joseph, Randy's driver, came around the truck and saw what was happening. He started yelling at the German, who didn't understand English, at least not Joseph's Kenyan English. The German nodded politely a few times, finally scooped up his scorpion and put it in another bottle.

Joseph wiped off the picnic table with a rag to reassure his charges. Most of the passengers from Randy's truck rather reluctantly drifted over and began taking sandwiches.

Randy looked around for Cora but couldn't find her. He considered getting her a sandwich as a sort of good-will gesture, saw that her nurse friend was already heading around to the other side of the truck with a sandwich in each hand, and gave up for the moment.

William was still negotiating with the Samburu girl, who'd been joined by two other girls of about the same age. Curious men and women were drifting in from every direction. The desert landscape looked totally devoid of life, but Randy had learned by now that whenever the truck stopped for more than a few minutes it would draw a crowd, seemingly from nowhere.

"Wasn't it someplace around here that they speared the tourists in that lorry last month?" one of the British ladies was asking another. Joseph overheard her and said, no, that had been a few hundred kilometers away, near one of the areas where they were going to be camping on their way back from Lake Turkana.

Randy got a full roll of film of the three Samburu girls without any of them suspecting he was photographing them. Most of the pictures were sure to have something wrong with them, of course—for all his practice he still couldn't get the same kind of results with his belt camera that he could normally—but a few at least were sure to work out.

He half-turned so nobody outside the truck would be able to see

what he was doing, opened the belt case and took out the camera, slipped the bright yellow roll of film out and put another in, then closed the case again. You had to look very closely to see that the case actually contained a functioning camera; most people who noticed it, even other photographers, thought it was just a spare lens case or something of the sort.

Randy's Uncle Phillip was vice-president of a tour company which was in the process of making the change-over from a small-time travel agency to something Uncle Phillip often said he was confident would be giving American Express stiff competition by the end of the decade. He'd seen three of Randy's photos in a group show in San Francisco—probably strong-armed into going by Randy's mother—and he'd told Randy he needed some photos for a new series of brochures his company was working up on Kenya, so would Randy like to do them?

Randy had said, of course he would.

That had been three o'clock on a Friday afternoon. At six-thirty Cora had come storming back from the department store she was working in to tell Randy that she'd been sleeping with someone from work for six months and it wasn't any good but it was still better than sleeping with him, that she was sick of selling handbags to support him and his photography when she could be finishing up her M.B.A. and getting started on a real career, in short, that she was quitting her job and getting a divorce.

So he'd come up with the idea for the trip—a month together, just the two of them, in Romantic Africa, everybody's dream vacation. They could try to settle their differences and find renewed joy in each other's company away from their day-to-day problems and pressures; at the very least it would ensure that their last few weeks together would be something they could remember without bitterness, maybe even with pleasure.

Give me one last chance, he'd begged Cora, telling her he'd found a job that would provide the money for the trip—and, not for the first time, Cora had given him one last chance.

Only he'd somehow never managed to get around to telling her just what the job in question had consisted of, and when, the first day of the Turkana Bus Tour (See Vanishing Africa!), Cora'd seen him sneaking pictures with the belt camera and found out that their dream vacation was limited to the group tours his uncle's company was interested in and included none of the luxury lodges he'd told her about when he'd sold her the idea of the trip, she'd moved out of his tent and in with the nurse.

The whole problem with their marriage, she'd told him, was

that he never faced facts or really tried to change; he always just came up with half-assed gimmicks and schemes when their problems together required real commitment, hard work, genuine solutions . . . and this trip, with his ridiculous hidden camera so he could rip off the starving natives to give her a cut-rate imitation second honeymoon, was the perfect example of what was wrong with him and with their marriage, and why there was no way she'd ever get back together with him again.

The el-Molo, when he saw them two days later, weren't worth photographing. A few huts of woven palm fronds patched with random trash, some women, children, and old men, all with rotten teeth, squatting in the shade among the fish bones and empty ten-gallon U.S. government surplus food oil cans. The men were supposedly great hunters, but as befitted great hunters, they were out hunting crocodiles and hippos, and so nowhere to be seen. Joseph claimed the el-Molo were the only totally non-violent people in this part of Kenya, but whatever that might say for their inherent morality, it did little to make them photogenic.

Randy paid his twenty shillings to the village headman—making sure Cora saw him doing so—then wandered around with his visible camera, hoping for a half-skinned crocodile or something equally picturesque, even some bare hippo bones, but couldn't come up with anything. Cora was still doing her best to pretend he didn't exist. A wasted morning.

On the way back to the campground, two khaki-clad soldiers carrying antique-looking rifles probably left over from World War I, stopped the truck. They had a rapid conversation with Joseph in Swahili, then joined him up front in the cab. Randy could hear them laughing loudly together as the truck swung away from the lakeshore out onto the dead, barren wastes of jagged volcanic rocks with only the rutted track and the occasional cairns of smoother, light-colored stones to indicate that anything living had ever been there before.

Half an hour later they joined the other truck beside two small, water-filled holes in the rock. Between a pair of low, heaped black gravel dunes Randy could glimpse Lake Turkana's potash-encrusted shore a few hundred yards away, the lake's bitter, alkaline waters glittering in the noon sun.

Joseph was explaining that the two water holes were actually medicinal springs. The first one caused diarrhea and enabled you to clean out your digestive tract; the second counteracted the

effects of the first. The ground around the springs was thick with dried excrement, some of it bovine, the rest presumably human.

### Romantic Africa.

Cora was standing with the nurse, laughing at something William was telling them. Probably parodying the lecture and making Joseph look like a fool—the engineer had that kind of wit.

Randy left half-way through the talk—he'd had a few problems with dysentery already and the last thing he needed was water guaranteed to cause it—and made his way down to the lakeshore, hoping for some crocodiles to photograph. The Samburu and el-Molo had scared them all away from the bay near the campground.

Something bright flapping on the other side of a fold in the terrain caught his attention. He climbed onto some rocks for a better look, found himself looking down at a skeletally-thin but powerfully-muscled African wearing bright yellow robes with some sort of black design batiked onto them.

The man was crouched over a hole he'd dug in the potash with his spear, working something free with his hands. For some reason Randy thought of the Leakeys hunting for fossils on the lake's far shore. Seven swollen-looking calabash bottles were resting on the white crust beside the man, and as Randy watched he worked the body of a huge black beetle free of the potash and put it in one of them, then went back to chipping away at the white crust with his spear-point again.

Randy realized belatedly that the medicine man or whatever he was was impossibly photogenic, and Randy hadn't been taking any pictures. He twisted his hip into position so he could use his belt camera, snapped his first picture—

The African jerked, spasmed, started to fall forward, then caught himself with his spear. He levered himself laboriously back to his feet and glared up at Randy, his lips drawn back from blunt yellow teeth in a terrifying snarl. He was older than he'd first seemed, his wrinkled face disfigured with ceremonial scars and tattoos . . . and his eyes had no white in them at all, the dilated black pupils were set in eyeballs the color of tomato juice.

Randy's fingers were still resting on the belt camera. Reflex made him snap another picture—and once again the medicine man jerked as though Randy had hit him with an electric cattle prod. He fell to his knees, tried to stand again, still clenching his spear and glaring at Randy with terrifying, inhuman malice, mouth open in a soundless scream of rage or hate.

Staring at the camera, as though that were what was sending him into convulsions. But it was impossible, nothing like this

could really be happening, Randy had to be undergoing some sort of bizarre delusion.

Randy kept on snapping pictures with his belt camera as the man jerked and spasmed on the snowy crust. The pictures would show what was really happening, that it wasn't his fault, that whatever it was, he hadn't done it, no matter how the man was looking at him. . . .

The African was bleeding from mouth and nose now. The black design on his yellow robes was a huge batiked scorpion. As he spasmed the black scorpion jerked and twisted like the scorpion in the German's killing bottle as it lashed out again and again at the glass.

He was having an epileptic seizure. Convulsions. He needed somebody to stick a spoon between his teeth, do something to keep him from hurting himself. Randy stared frozen at him an instant longer, unable to overcome his terror and go to the man's aid, then wrenched his hand away from the camera and yelled for Joseph.

Only then did he see Cora standing on the hill behind him. She had to have followed him away from the others, had to have been standing watching him as he took picture after picture of the man's seizure without even trying to do anything to help him.

Randy turned away from her, unable to meet the accusation in her eyes. The man was still now, sprawled face-down on the gleaming white, the scorpion on his flapping robes jerking and snapping with the wind.

The older-looking soldier turned the body over with his foot, knelt beside it and checked for a pulse. He said something in Swahili.

"This man is dead," Joseph translated. "What happened?"

The dead man's features were calm, peaceful, even handsome despite his scars, with none of that terrifying malevolence Randy had seen before. He felt ashamed of himself, of the way he'd hung back when he might have been able to do something to help.

Randy told Joseph about having seen the man digging things out of the crust with his spear and hands, about how all of a sudden he'd gone into convulsions as though he'd been having an epileptic fit. He didn't mention anything about the pictures he'd taken, the way the man had stared at him as though recognizing him, blaming him for what was happening, hating him for it. None of that was real. The pictures would prove it wasn't real when he developed them, the way that picture he'd once taken

of what he'd been sure had been a flying saucer had proven it to be just a hot-air balloon and made him look like a fool to everybody else at the small-town California newspaper where he'd been working that summer.

Joseph translated. The soldier peered into one of the gourds, sniffed it, dumped a number of black beetles still encrusted with potash out of it, then gave the younger soldier an order. The second soldier slung the body casually over his shoulder and started back to the trucks with it. Most of the tourists seemed in a state of shock, but neither Joseph nor the soldiers seemed particularly upset.

"But . . . who was he?" Cora asked Joseph. "What was he doing, digging there?"

Joseph shrugged. The man wasn't anyone worth worrying about. He wasn't from around there, probably not even Kenyan. Another refugee from Uganda, probably, though he wasn't a Shifta or part of any tribe Joseph was familiar with. As for what he was doing there, a lot of the local tribes used the minerals and other things they found in the Lake Turkana potash deposits in their medicines; he must've been doing something similar.

The soldier dumped the body on the floor of Randy's truck, then went back up front. Joseph and the other soldier joined him in the cab and in a moment all three were laughing and exchanging stories again as though nothing had happened. For them, nothing had.

Randy climbed into the truck, sat down by the body, stared at it without really seeing it. The other passengers milled around outside a moment, nervous, twittering and self-conscious, then most of them crowded together into the back of the second truck. Cora and the nurse were among the half-dozen or so others who finally ended up staying on Randy's truck.

The nurse, practical for once, found a blanket and covered the body, breaking Randy's trance. He looked up. Cora was watching him again.

"Cora, it just happened, I—" But it was no use, he hadn't done anything, he didn't have anything he could apologize for, there was nothing he could do to stop the way Cora was looking at him, what she was thinking about him.

Joseph started the truck. Randy turned away from Cora, stared back over his shoulder. Everything was dead and desolate, utterly hostile.

Back at the campground he checked the belt camera: He'd taken



eleven pictures of the African on a fresh roll of film; he still had twenty-five left to go.

After lunch Joseph took them down to go swimming in the bay where the Samburu launched their fishing boats. Everyone seemed determined to stay together as a group, forget that anything out of the ordinary had happened. Randy went along but decided to stay dressed and on shore, both because he needed more pictures Uncle Phillip could use and because he didn't want to risk having his camera ripped off.

There was some sort of ceremony going on, perhaps a kind of christening for the brightly-painted red and blue boat which a half-dozen young Samburu warriors were paddling frenziedly away from shore while an equal number of adolescent Samburu girls stood in a line on the shore singing and dancing. They looked for all the world like a group of Hawaiians doing a commercialized hula dance: almost the same gestures, somehow the same spirit, though as far as Randy could tell the whole thing wasn't being put on for the tourists, of whom there weren't more than twenty at the moment anyhow.

Randy found himself hesitating, told himself he was being ridiculous, and took a picture of the girls with his belt camera.

One girl stumbled and had to be grabbed by another before she fell, but that was just a coincidence, the other girls seemed to think it was funny and went right on singing and dancing, and a moment later the girl who'd faltered was back singing and dancing with them.

Randy took eight more pictures of them and some of the men when they came racing back to shore to jump fully clothed out of their boat and prance the last few yards back to dry land, all of them laughing, and nothing bad happened to any of them, so Randy knew that everything was really all right after all.

Cora and the others had stayed in and around the truck, watching, but as soon as the ceremony—if that's what it had been—was over they stripped to their swimming suits and went in. Cora had her red and black bikini on, the one she'd bought for the trip to Jamaica that hadn't worked out, and she looked as carefree and beautiful as she had when Randy'd first met her, five years ago. As though she'd forgotten all about him, didn't even care enough to be angry or unhappy around him anymore. As though he no longer existed for her.

The water was muddy, alkaline, clogged with some sort of water-weed; anywhere but in a desert it would have seemed to-

tally uninviting. Yet Randy couldn't keep himself from feeling envious of the others, as they played a sort of water-tag they'd invented, with the one who was *it* sneaking up on the others with handfuls of mud and waterweed which he or she tried to slap onto his victims' heads. The whole thing soon degenerated into a free-for-all mud fight. Randy got a picture of Cora slapping a double handful of mud triumphantly down on William's thinning hair as William, unsuspecting, surfaced too close to her, another of William catching her in the back with a huge gob of mud as she tried to wade in to shore, forcing her to swim back out and submerge herself again to get it off, before Randy realized that pictures of mud-fights were going to do him no good whatsoever with Uncle Phillip's company. Uncle Phillip wanted pictures of glamorous, romantic Africa, not mud or poverty or men dying of epilepsy.

But even so Randy used his visible camera to take pictures of the naked children as they accosted the tourists to tell them in their surprisingly precise, mission-school English that they all wanted to be doctors, if only they could raise enough money to continue their educations, though that meant Randy ended up paying some of the children a couple of shillings apiece.

"The Samburu are all rich," the old man in the raincoat had informed Randy yesterday, as they'd driven through the hovels near the campground. "Like the Masai, only the Masai are a lot richer, of course. It's just that they put their wealth in cows and *like* living in filth."

One of the children had approached the old man in the raincoat and was trying to strike up a conversation with him . . . and the old man was gesticulating furiously, almost screaming as he drove the child off. He'd said something the day before yesterday about how all Africans were incapable of dealing with machinery, how the trucks wouldn't keep on breaking down if they could just get proper British drivers. . . .

Randy got in four pictures of the old man quickly with his belt camera, half-hoping taking his pictures would have some effect on him, though of course it didn't. With a little luck he'd get a whole photographic essay, maybe even a book, out of the old geezer and his tantrums: "Colonial Britain Face to Face with the New Africa" or something like that. . . . Even if he did get it published nobody'd ever see it except other photographers; he wouldn't have to worry about his subject seeing a copy and trying to sue him.

While he'd been concentrating on the old man Cora had intercepted the child the old man had driven off and was writing

something down for him on a piece of paper. Her address, probably, At her parents' house in San Jose, not the apartment she'd shared with Randy.

Randy took a perfect picture of her talking to the child with the shoulder-strap camera, the brightly-painted Samburu boat in the background. Just the kind of picture Uncle Phillip wanted.

Randy awakened from a nightmare that night to the sound of a faint, dry scrabbling somewhere near his pack, and remembered the scorpion the German had unearthed. He grabbed his flashlight, used it to check out his shoes, backpack, the sleeping bag he'd been lying on top of, the rest of the tent. Nothing. Probably the wind rustling through the palm fronds overhead.

His watch said four-ten: He'd have to get up in another twenty minutes anyway. Resigned, he groped for his towel and toothbrush and headed for the shower.

The old man was already up, meticulously disassembling his tent. He nodded a curt hello as Randy passed him.

Noon found them in the midst of the Kaisut desert, eating meat loaf sandwiches again and drinking sickeningly sweet pineapple juice while Cora and William bargained with a young Ariaal Rendille girl whose hair, an elaborate cockscomb plastered with dried red mud, proclaimed her a mother. They finally persuaded her to accept fifteen shillings for all the photos of her with her camel that the group could take.

Just after the tourists, with the old man in the raincoat in the first rank, began snapping their pictures Randy heard the sound of a car approaching, the first vehicle they'd encountered since leaving Lake Turkana at five-thirty that morning.

A candy-apple red Range Rover came into view, stopped by their trucks in a cloud of dust while the driver asked Joseph something. There was a blond girl sunbathing topless on the Range Rover's roof, her skin glowing red with what was soon going to be a fierce sunburn.

The tourists who'd been crowded around the Ariaal Rendille girl and her camel turned away to photograph the blond girl, who seemed delighted with the attention and preened herself on the roof. The Brighton garage owner yelled out "Ten shillings!" to her.

Furious at having had her audience stolen from her, the Ariaal Rendille girl stalked over to the Range Rover and began yelling

at the blond girl, while the overjoyed tourists snapped pictures of their confrontation.

Randy got a picture of the old man's face as he took picture after picture of the two bare-breasted girls with the camera which Randy had noticed he only took out of its plastic sack when there were African girls to photograph, then circled around behind him and managed to get the two girls, the Range Rover, and the old man with his camera in a single shot using the belt camera.

Cora and William were soothing the Ariaal Rendille girl as best they could. It was another perfect picture for Uncle Philip—handsome, fun-looking young couple talking with picturesque native girl—and Randy forced himself to photograph the two of them laughing together, just as he'd forced himself to photograph the two of them laughing together as they'd disassembled the tent they'd shared the night before.

If Cora was going to humiliate him in public like that, she might as well help him pay for the trip. Especially since the pictures he was getting of her with William would be more than sufficient to prove to his family—and to an eventual divorce court—that Randy, not Cora, had been the one wronged, and that Cora deserved neither sympathy nor alimony.

That evening, after fourteen hours of uninterrupted dust and desert heat, during which they'd passed nomads on camels and piles of bleached bones and been attacked by clouds of flies the size of clothes moths, they reached a mud puddle with a broken-handled pump at its edge: their camp site.

The old man in the raincoat had been unable to take the heat, and half-way through the afternoon had finally accepted a drink from one of the water tanks. Now he was sick and furious, yelling at Joseph that he'd been promised they were all going to get luxury showers that night, that there were animal tracks and dung all around the puddle from which he'd seen the cooks drawing the water for his tea, that there'd been gasoline—he said petrol—in the can they'd all drunk from earlier . . . that things had never been like this when he'd been in Egypt and that if they'd had the sense to put a white man in charge of the safari this kind of thing would never have been allowed to happen, as he intended to make perfectly clear to the management as soon as they got back to Nairobi. . . .

Joseph listened patiently as the old man went on and on, getting redder and shriller all the time, almost jumping up and down in his rage, like a withered infant having a tantrum. He was yelling,

"I'm sick, damn you, and it's all your fault!" when the heat, exertion, and emotion proved too much for him and he collapsed.

Randy had run out of film for the belt camera a few moments before and had just enough film left in his shoulder-strap camera to get a picture of the nurse trying to give the old man artificial respiration.

He ducked back into his tent, broke two yellow rolls of film out of their boxes, changed the film in the larger camera, then hesitated.

No, he wanted to be able to take more pictures of the old man unobserved as soon as he recovered. Randy was willing to bet he'd try to blame Joseph for his fainting spell. Which wouldn't work; there was no way he could blame Joseph and get away with it, but it would make for an interesting confrontation, show the old man up for what he really was one final time. Just as the picture he'd taken through the tent flap that Cora and William had been too absorbed in their lovemaking to close would show Cora up for what *she* really was.

He fumbled the belt case open, took the camera out, cracked it open with one hand while he reached for the replacement roll of film.

And froze as the yellow and black scorpion that had been curled in the compartment where the roll of film should have been emerged in one rapid, dry scuttling motion. He dropped the camera but the thing clung to his forearm with its dry, clawed legs, staring at him from tiny globular eyes the color of tomato juice.

It was almost five inches long.

Randy tried to hold himself perfectly still; any movement might be enough to make the scorpion strike. He was sweating, his arm was shaking uncontrollably; he could feel the scorpion's tiny claws digging into his flesh, its dry, almost weightless body pressed against his skin.

Outside one of the women shrieked, then began weeping while someone else tried to calm her and the others began talking to one another in loud, hysterical voices which nonetheless contained a certain amount of thinly veiled relief.

Randy had just enough time to realize how much the scorpion on his arm resembled not only the African he'd killed with his camera but also the old man who'd just now died, just enough time to think, with a last desperate grasping at rationality, how impossible it was for a five-inch arachnid to resemble a human being at all, much less two specific persons at the same time, before the long jointed tail with the sting on the end came whip-

ping up over the scorpion's back with a crabbed movement like the old man thrashing a child with a cane and buried itself in the soft flesh of his forearm, just below the elbow, where the school nurse had always given him his tetanus shots as a child.

His arm was burning, but he clenched his jaw shut, he kept himself from making any noise whatsoever as he jerked the scorpion from his arm and crushed it with his flashlight. He didn't want Cora to know, he wanted her with William when someone else found his body.

That was all he had left: the moment when all the old men and women would be staring at her, their unspoken accusations when they realized she'd spent the night in another man's tent while her husband was dying alone and in agony.

He lay down on his sleeping bag, legs together, arms at his side, and closed his eyes, keeping the image of Cora's coming humiliation, her slumped shoulders and frustrated anger, perhaps even her too-long delayed pity, between himself and the pain as the burning spread through his arm and body, as his vision blurred and the cramps began. ●



## NEXT ISSUE

The famous (or infamous) Clarion workshop—what happens there? What doesn't? Algis Budrys sheds light on this mystery in his fascinating June Viewpoint, "Clarifying Clarion." Our cover story, "Bloodchild," is a terrifying yet touching tale by Octavia E. Butler. We've also got fiction by Tanith Lee, James Patrick Kelly, and others, so be sure to pick up your copy. On sale May 8, 1984.



# A CITIZEN OF 3 V

art: Odibert

by Ronald Anthony Cross

The author, who lives in Santa Barbara, has appeared in *Orbit*, *The Berkley Showcase*, *New Worlds*, and the March Issue of *IASfm*, with "The Forever Summer." His novelette, "The Dolls," was nominated for a Nebula award in 1981. We hope to be seeing more of his work soon.

As anyone will tell you, anyone who keeps his eyes open and isn't stuck in a rut, watching the same old programs on the same old channels, in the same old language, from the same old nation, day after day, month after month, year after year—where was I?

Oh yeah, as anyone will tell you, anyone who is your above-average, sharp, alert 3V viewer, that is, 3V greatness is a fleeting shadow, always changing shape, and always moving on. Just when you think you've got it nailed down and you can seep down into your squishy chair and beer out, the genius fades out of what you're watching and leaves you stranded, tangled up in a skeleton of something that used to be alive and kicking. The weak just grit their teeth and drink their beer and train themselves to never notice. The strong grit their teeth and jump up and start in changing channels. They know it's there somewhere. It never dies out, it only shifts from one area into another. The strong will never be satisfied with less than great 3V, and they will do whatever it takes to find it.

But it's easy to forget how quickly it can all change. Worse, you want to forget and just settle down into it forever.

That's the way it was last week with Spain.

I was in love with Spain, that cold aristocratic dignity, that poetic elegance and grace, all of it tinged with an unmistakable but subtle hue of macho tragedy, like a ray of sunlight permeating a goblet of sangria.

Spanish 3V programs were all I watched now. I found the ridiculous comedies charmingly naive and innocent; the soap operas that might have been merely feminine melodrama seemed to have assumed from the nature of the Spanish mind a hint of truth in tragedy. The adventure programs were straightforward and manly, yet somehow graced with an element of dignified restraint. The actors and actresses were all filled with dark flashing sad proud beauty: I loved them all. I loved Spanish 3V. I got carried away. As usual.

And so, after three weeks of intensively studying Spanish (yes, we even played the tapes in our sleep), my wife Sylv and I became citizens of Spain in a two-way 3V ceremony filled with pomp and pageantry. Sylv, though not as carried away with it all as I was, nevertheless decided, as she usually had in the past, to just go along for the ride.

Well, the ceremony was regal and the first couple of days of Spanish life were lovely. The crisp clapping sound of my shiny black boots on the newly tiled floors of our hacienda. The refreshing thrill of the first sip of the first evening glass of sangria. Sylv's



dark eyes (recently tinted) framed in thick black lashes, flashing at me from behind her delicate fluttering fan: a black butterfly in her ivory (recently bleached) hand.

Even when they talked with me over the set about the possibility of war with Scotland, I could not seem to separate it in my mind from the macho adventure programs I had been watching. In fact, I have to admit it, it appealed to me; or rather, it appealed to something in me that was newly being born, something macho and proud and peculiarly Spanish, something national that whispered in my ear: "Spain against all else."

And so it was that, armed with a mass of surveillance equipment—cameras, receivers, bugs, binoculars, etc.—I set out of doors for the first time in weeks.

I remember actually reeling under the assault of light and odors. It isn't natural for man to go outdoors, I said to myself, but I quickly rebuked myself for that. What the hell kind of rugged Spaniard is that, I thought.

I began to struggle up the hilly slope directly behind the house. This is the way I reasoned it: if I could get to the top of the hill, I could set up reconnaissance on the house next to ours with no sweat. He would never know I was doing it, unless he had installed one of those new Smythe & Summers anti-bug detectors, and the beauty of it was I happened to know that he could not have done so. Smythe & Summers had told me that I was the only man in the neighborhood to have installed the S&S debugger last week when they had first advertised over the 3V. It was a great deal.

Anyhow, here I was, struggling up a very steep hill in the hot Burbank sun, carrying a very heavy armful of reconnaissance equipment, to spy on my next-door neighbor down below, his house practically glued to mine.

A Spaniard spying on a Scotsman in Burbank. It should have struck me as ridiculous, but it did not. Spaniards have no sense of humor. Later on, that struck me as definitely being one of the weak points of a macho Spanish male lifestyle, but then, that was later.

Struggling up the hill, through the dry weeds full of stickers and burrs which magically attacked my socks and slid down into my shoes, I began to itch and wheeze. The air was thick with heat and pollen. It was like being under water. Thick hot water. The closer I got to the top, the more I had to rest. In fact, I could hardly go two or three steps without stopping to squat down into the hostile hill shrubbery, where I would wheeze and pant, gagging

in huge draughts of itchy hot air, heart pounding wildly, head aching.

I remember looking down and suddenly having the illusion of everything down below receding even farther until it seemed as if the tiny little dolls' houses all stacked together in a row were in another world, inhabited by another species. What primitives they must be, I thought to myself.

I could see in my mind's eye Mr. Parkens and myself strutting out of our little toy houses and dancing around our miniscule backyards, he in his kilt and I in my Spanish don's outfit. I blinked. The vision went away. My heart felt better—soon I was to realize what a fickle deceiver my heart could be.

By the time I got to the top of the hill and had started setting up the equipment, I was beginning to feel doubts. Just because I had seen him and his wife parading about in kilts last week, and just because we ("we" meaning Spain) were going to war with them ("them" meaning Scotland), nonetheless, the oaf was my next-door neighbor. Probably the worst thing you could accuse him of was bad taste—well, atrocious taste.

I was having a stream of thoughts along those lines, when it gradually but inexorably dawned on me what was happening.

My troublesome body signs began to insinuate themselves into my consciousness and force out all other thoughts. They would have done so sooner and with more immediacy had I not been struggling so hard to suppress them: I did not want to know this.

Suddenly it was obvious. The pain in my left arm and shoulder was sharp and getting sharper, I just couldn't catch my breath even though I was no longer climbing the hill, and even my head ached.

But all this was secondary to the slow, surprisingly dull, but steady pain spreading and growing in my chest. I was suddenly aware that I had been moving crumpled over; I had to lie down now, or fall down, into the noxious weeds. I was having a heart attack, right here, right now!

Don't panic. Don't panic. Nobody dies of a heart attack nowadays. The home computer should pick up what's happening from the body sensor that they implanted for just that purpose, and automatically broadcast it to the nearest flying emergency med unit. They should be here within seconds—well, minutes.

Time passed, in a strange slow haze of pain.

What the hell was I doing with my own heart anyhow? Forty-five years old and I still had my own goddamn silly 100 percent kosher, honest-to-God old-fashioned real meat heart. Forty-five

years, the same meat pump. What the hell did I expect out of it—miracles? Time crawled by in a pulsing throbbing rhythm that hurt. That terrified.

Everybody had warned me. Get a superplastic artificial heart now. Superpump. Guaranteed for a lifetime and a half, folks. You'd better will this one to your son. Ha ha.

This model here has two emergency back-up systems. Should one fail, which is, putting it mildly, ha ha, quite unlikely, the other cuts right in and takes over until the info broadcast by your body system sensor reaches . . .

But no, I'm only forty-three, I had rationalized. Besides, I really need that new 3V wall in the bathroom, and Junior's looking forward to a new skimmer boat. Maybe next year. And then maybe next year. And suddenly here I am forty-five years old and dying of a heart attack.

Dying? Yes, dying. Dying. Dying. Dying, the word pounded in my head, merged with the passage of time, was the passage of time, was the pain. They all were one terrible total thing. Now, dying on a hilltop, in high weeds, in heat and pain. Now.

I must have passed out, or at least passed into another realm of consciousness where pain and death were the only reality, because I was totally unaware of the emergency cables being attached.

Then someone was shaking me. It was my neighbor, Parkens.

"Can you hear me, Whickers? Good. I said, you're going to be all right. I've got you plugged into mine. It's a good one. One of those new superplastic superpumps. It'll handle the load for a while. All we have to do is lie back and wait. The emergency air unit should be here soon. Just lie there, don't move, that's it, fine. Don't try to talk," he said.

"Does it hurt you?" I was trying to remember how it was done. But it was hard to concentrate on anything. Something about an electrical charge from his heart . . .

"Feels strange," he admitted, "not so good." He was lying down, too. He looked a little sick to me, but then, what didn't?

Or was his heart operating mine somehow by remote control? The cable seemed to be clamped around my chest and his. I'm going to have to watch more educational 3V, I promised myself, after this is over. I knew I would break the promise as I was making it. But at least it allowed me to drop that line of thought.

"How did you find me?"

"Easy," he said, "I've got one of those new S&S debuggers."

"Smythe & Summers," I said, in such a tone of indignation that

it caused me to gasp in pain. "They said I was the only one in my neighborhood to . . ." My voice dwindled off.

"Don't believe everything you hear on 3V," Parkens said.

"And where's the goddamn emergency air unit? They're supposed to reach you from anywhere in the USA within ten minutes."

"Don't believe everything you hear on 3V," he said again.

Then: "Listen, try not to talk. Just lie back and rest. Only tell me one thing if you can, huh? Why the hell are you practicing surveillance on my house? Could you tell me that? Don't strain yourself."

"Spanish-Scottish war," I grunted.

"Oh, yeah," he said. "I got it. The kilts. The bagpipes. Well, you can relax, Whickers, I'm not Scottish. Never was."

"Can you keep a secret?" He peered into my eyes as if searching my soul for the answer. Then he grunted.

"Fat chance. Well, anyway, here it is. I'm not a citizen of any country at all. I figure why bother? What the hell difference does it really make? I just watch any programs I want from any country, but I don't get carried away—see? Who the hell knows what I'm going to be watching next week, right? Or the week after?"

"I guess I'm sort of a citizen of 3V," he said.

Then we both lay back and waited for the emergency air unit, which didn't show up for another hour and a half.

"I was on my lunch break," the pilot-doctor announced nonchalantly, still picking his teeth with some thin delicate medical tool I should be able to name but can't—surely not a scalpel—as he climbed down out of the copter.

An hour later and I was being helped back down the hill to my charming little hacienda, with a new heart pounding lustily in my Spanish breast and an exorbitant bill in my tight Spanish pants pockets.

Well, to finish up the story, they called the war off, or it was all a bluff in the first place. The reason they gave was that they came to certain agreements with Scotland, but I know better. I think it's just getting too confusing to have a war anymore. Too many citizens in too many countries to even keep track of. Nations don't mean anything anymore anyhow, so how the hell can you get all worked up over this country's squabbles with that country, when all you have to do is change the channel and zap, you're in another world. I guess we're all citizens of 3V. And I guess Parkens isn't so stupid either. He saved my life.

I've gotten bored with Spanish 3V already; I've renounced my citizenship with Spain. For the time being I'm just sort of letting it ride. Don't get too involved. Just sit back in the old squishy chair and beer out and ride those channels, cowboy, drifting all over the vast universe of 3V. Let's just wait and see. ●

MARTIN GARDNER

(from page 81)

## FINAL SOLUTION TO TWO ODD COUPLES

Below is the answer to last month's cryptarithm by Alan Wayne:

$$\begin{array}{r} 653924 \\ 653924 \\ \hline 1307848 \end{array}$$

The problem first appeared in the *Two-Year College Mathematics Journal*, June 1979, and was answered in the November 1980 issue, pages 337-338.

When I wrote last month about the game with ten cards, based on monotonic subsequences, I did not know it had already been solved by Frank Harary, Bruce Sagan, and David West. The first player can always win by taking a five on his first move. In the reverse game, the first player wins by taking a two. This is proved in their unpublished paper, "Computer-Aided Analysis of Monotonic Sequence Games."

In this paper the authors consider games based on a generalization of the theorem I gave last month. The generalized theorem asserts that if  $N$  and  $M$  are non-negative integers, any sequence of at least  $NM + 1$  distinct integers must contain an increasing subsequence of length  $N + 1$ , or a decreasing subsequence of length  $M + 1$ . The authors could not find a general strategy for standard or reverse two-person games based on this theorem. It is not yet known whether the first or second player has the win in a game with 17 cards ( $M = N = 4$ ) bearing numbers 1 through 17, when players seek to achieve (or avoid) obtaining a monotonic (increasing or decreasing) subsequence of five numbers.

I will report in a later issue on any interesting letters received from readers of last month's column.

# PRESS ENTER

by John Varley

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It's hard to list all the accomplishments of this well-known author in this space. He's been the recipient of two Hugos and one Nebula, his best-selling novel, *Millennium*, will soon be a major motion picture, and his short story, "Overdrawn at the Memory Bank," has been made into a short film by PBS.

His latest novel, *Demon*, out soon from Berkley, concludes the popular trilogy that began with his novels, *Titan* and *Wizard*.

art: Laura Lakey/Artifact





"This is a recording. Please do not hang up until—"

I slammed the phone down so hard it fell onto the floor. Then I stood there, dripping wet and shaking with anger. Eventually, the phone started to make that buzzing noise they make when a receiver is off the hook. It's twenty times as loud as any sound a phone can normally make, and I always wondered why. As though it was such a terrible disaster: "Emergency! Your telephone is off the hook!!!"

Phone answering machines are one of the small annoyances of life. Confess, do you really *like* talking to a machine? But what had just happened to me was more than a petty irritation. I had just been called by an automatic dialing machine.

They're fairly new. I'd been getting about two or three such calls a month. Most of them come from insurance companies. They give you a two-minute spiel and then a number to call if you are interested. (I called back, once, to give them a piece of my mind, and was put on hold, complete with Muzak.) They use lists. I don't know where they get them.

I went back to the bathroom, wiped water droplets from the plastic cover of the library book, and carefully lowered myself back into the water. It was too cool. I ran more hot water and was just getting my blood pressure back to normal when the phone rang again.

So I sat there through fifteen rings, trying to ignore it.

Did you ever try to read with the phone ringing?

On the sixteenth ring I got up. I dried off, put on a robe, walked slowly and deliberately into the living room. I stared at the phone for a while.

On the fiftieth ring I picked it up.

"This is a recording. Please do not hang up until the message has been completed. This call originates from the house of your next-door neighbor, Charles Kluge. It will repeat every ten minutes. Mister Kluge knows he has not been the best of neighbors, and apologizes in advance for the inconvenience. He requests that you go immediately to his house. The key is under the mat. Go inside and do what needs to be done. There will be a reward for your services. Thank you."

Click. Dial tone.

I'm not a hasty man. Ten minutes later, when the phone rang again, I was still sitting there thinking it over. I picked up the receiver and listened carefully.

It was the same message. As before, it was not Kluge's voice.



It was something synthesized, with all the human warmth of a Speak'n'Spell.

I heard it out again, and cradled the receiver when it was done.

I thought about calling the police. Charles Kluge had lived next door to me for ten years. In that time I may have had a dozen conversations with him, none lasting longer than a minute. I owed him nothing.

I thought about ignoring it. I was still thinking about that when the phone rang again. I glanced at my watch. Ten minutes. I lifted the receiver and put it right back down.

I could disconnect the phone. It wouldn't change my life radically.

But in the end I got dressed and went out the front door, turned left, and walked toward Kluge's property.

My neighbor across the street, Hal Lanier, was out mowing the lawn. He waved to me, and I waved back. It was about seven in the evening of a wonderful August day. The shadows were long. There was the smell of cut grass in the air. I've always liked that smell. About time to cut my own lawn, I thought.

It was a thought Kluge had never entertained. His lawn was brown and knee-high and choked with weeds.

I rang the bell. When nobody came I knocked. Then I sighed, looked under the mat, and used the key I found there to open the door.

"Kluge?" I called out as I stuck my head in.

I went along the short hallway, tentatively, as people do when unsure of their welcome. The drapes were drawn, as always, so it was dark in there, but in what had once been the living room ten television screens gave more than enough light for me to see Kluge. He sat in a chair in front of a table, with his face pressed into a computer keyboard and the side of his head blown away.

Hal Lanier operates a computer for the L.A.P.D., so I told him what I had found and he called the police. We waited together for the first car to arrive. Hal kept asking if I'd touched anything, and I kept telling him no, except for the front door knob.

An ambulance arrived without the siren. Soon there were police all over, and neighbors standing out in their yards or talking in front of Kluge's house. Crews from some of the television stations arrived in time to get pictures of the body, wrapped in a plastic sheet, being carried out. Men and women came and went. I assumed they were doing all the standard police things, taking

fingerprints, collecting evidence. I would have gone home, but had been told to stick around.

Finally I was brought in to see Detective Osborne, who was in charge of the case. I was led into Kluge's living room. All the television screens were still turned on. I shook hands with Osborne. He looked me over before he said anything. He was a short guy, balding. He seemed very tired until he looked at me. Then, though nothing really changed in his face, he didn't look tired at all.

"You're Victor Apfel?" he asked. I told him I was. He gestured at the room. "Mister Apfel, can you tell if anything has been taken from this room?"

I took another look around, approaching it as a puzzle.

There was a fireplace and there were curtains over the windows. There was a rug on the floor. Other than those items, there was nothing else you would expect to find in a living room.

All the walls were lined with tables, leaving a narrow aisle down the middle. On the tables were monitor screens, keyboards, disc drives—all the glossy bric-a-brac of the new age. They were interconnected by thick cables and cords. Beneath the tables were still more computers, and boxes full of electronic items. Above the tables were shelves that reached the ceiling and were stuffed with boxes of tapes, discs, cartridges . . . there was a word for it which I couldn't recall just then. It was software.

"There's no furniture, is there? Other than that . . ."

He was looking confused.

"You mean there was furniture here before?"

"How I would I know?" Then I realized what the misunderstanding was. "Oh. You thought I'd been here before. The first time I ever set foot in this room was about an hour ago."

He frowned, and I didn't like that much.

"The medical examiner says the guy had been dead about three hours. How come you came over when you did, Victor?"

I didn't like him using my first name, but didn't see what I could do about it. And I knew I had to tell him about the phone call.

He looked dubious. But there was one easy way to check it out, and we did that. Hal and Osborne and I and several otherstrooped over to my house. My phone was ringing as we entered.

Osborne picked it up and listened. He got a very sour expression on his face. As the night wore on, it just got worse and worse.

We waited ten minutes for the phone to ring again. Osborne

spent the time examining everything in my living room. I was glad when the phone rang again. They made a recording of the message, and we went back to Kluge's house.

Osborne went into the back yard to see Kluge's forest of antennas. He looked impressed.

"Mrs. Madison down the street thinks he was trying to contact Martians," Hal said, with a laugh. "Me, I just thought he was stealing HBO." There were three parabolic dishes. There were six tall masts, and some of those things you see on telephone company buildings for transmitting microwaves.

Osborne took me to the living room again. He asked me to describe what I had seen. I didn't know what good that would do, but I tried.

"He was sitting in that chair, which was here in front of this table. I saw the gun on the floor. His hand was hanging down toward it."

"You think it was suicide?"

"Yes, I guess I did think that." I waited for him to comment, but he didn't. "Is that what you think?"

He sighed. "There wasn't any note."

"They don't always leave notes," Hal pointed out.

"No, but they do often enough that my nose starts to twitch when they don't." He shrugged. "It's probably nothing."

"That phone call," I said. "That might be a kind of suicide note."

Osborne nodded. "Was there anything else you noticed?"

I went to the table and looked at the keyboard. It was made by Texas Instruments, model TI-99/4A. There was a large bloodstain on the right side of it, where his head had been resting.

"Just that he was sitting in front of this machine." I touched a key, and the monitor screen behind the keyboard immediately filled with words. I quickly drew my hand back, then stared at the message there.

PROGRAM NAME: GOODBYE REAL WORLD

DATE: 8/20

CONTENTS: LAST WILL AND TESTAMENT; MISC. FEATURES

PROGRAMMER: "CHARLES KLUGE"

TO RUN

PRESS ENTER■

The black square at the end flashed on and off. Later I learned it was called a cursor.

PRESS ENTER■

Everyone gathered around. Hal, the computer expert, explained how many computers went blank after ten minutes of no activity, so the words wouldn't be burned into the television screen. This one had been green until I touched it, then displayed black letters on a blue background.

"Has this console been checked for prints?" Osborne asked. Nobody seemed to know, so Osborne took a pencil and used the eraser to press the ENTER key.

The screen cleared, stayed blue for a moment, then filled with little ovoid shapes that started at the top of the screen and descended like rain. There were hundreds of them in many colors.

"Those are pills," one of the cops said, in amazement. "Look, that's gotta be a Quaalude. There's a Nembutal." Other cops pointed out other pills. I recognized the distinctive red stripe around the center of a white capsule that had to be a Dilantin. I had been taking them every day for years.

Finally the pills stopped falling, and the damn thing started to play music at us. "Nearer My God To Thee," in three-part harmony.

A few people laughed. I don't think any of us thought it was funny—it was creepy as hell listening to that eerie dirge—but it sounded like it had been scored for pennywhistle, calliope, and kazoo. What could you do but laugh?

As the music played, a little figure composed entirely of squares entered from the left of the screen and jerked spastically toward the center. It was like one of those human figures from a video game, but not as detailed. You had to use your imagination to believe it was a man.

A shape appeared in the middle of the screen. The "man" stopped in front of it. He bent in the middle, and something that might have been a chair appeared under him.

"What's that supposed to be?"

"A computer. Isn't it?"

It must have been, because the little man extended his arms, which jerked up and down like Liberace at the piano. He was typing. The words appeared above him.

SOMEWHERE ALONG THE LINE I MISSED SOMETHING. I SIT HERE, NIGHT AND DAY, A SPIDER IN THE CENTER OF A COAXIAL WEB, MASTER OF ALL I SURVEY . . . AND IT IS NOT ENOUGH. THERE MUST BE MORE.

ENTER YOUR NAME HERE■

"Jesus Christ," Hal said. "I don't believe it. An interactive suicide note."

"Come on, we've got to see the rest of this."

I was nearest the keyboard, so I leaned over and typed my name. But when I looked up, what I had typed was VICT9R.

"How do you back this up?" I asked.

"Just enter it," Osborne said. He reached around me and pressed enter.

DO YOU EVER GET THAT FEELING, VICT9R? YOU HAVE WORKED ALL YOUR LIFE TO BE THE BEST THERE IS AT WHAT YOU DO, AND ONE DAY YOU WAKE UP TO WONDER WHY YOU ARE DOING IT? THAT IS WHAT HAPPENED TO ME.

DO YOU WANT TO HEAR MORE, VICT9R? Y/N■

The message rambled from that point. Kluge seemed to be aware of it, apologetic about it, because at the end of each forty or fifty-word paragraph the reader was given the Y/N option.

I kept glancing from the screen to the keyboard, remembering Kluge slumped across it. I thought about him sitting here alone, writing this.

He said he was despondent. He didn't feel like he could go on. He was taking too many pills (more of them rained down the screen at this point), and he had no further goal. He had done everything he set out to do. We didn't understand what he meant by that. He said he no longer existed. We thought that was a figure of speech.

ARE YOU A COP, VICT9R? IF YOU ARE NOT, A COP WILL BE HERE SOON. SO TO YOU OR THE COP: I WAS NOT SELLING NARCOTICS. THE DRUGS IN MY BEDROOM WERE FOR MY OWN PERSONAL USE. I USED A LOT OF THEM. AND NOW I WILL NOT NEED THEM ANYMORE.

PRESS ENTER■

Osborne did, and a printer across the room began to chatter, scaring the hell out of all of us. I could see the carriage zipping back and forth, printing in both directions, when Hal pointed at the screen and shouted.

"Look! Look at that!"

The compugraphic man was standing again. He faced us. He had something that had to be a gun in his hand, which he now pointed at his head.

"Don't do it!" Hal yelled.

PRESS ENTER■

The little man didn't listen. There was a denatured gunshot sound, and the little man fell on his back. A line of red dripped down the screen. Then the green background turned to blue, the printer shut off, and there was nothing left but the little black corpse lying on its back and the word **\*\*DONE\*\*** at the bottom of the screen.

I took a deep breath, and glanced at Osborne. It would be an understatement to say he did not look happy.

"What's this about drugs in the bedroom?" he said.

We watched Osborne pulling out drawers in dressers and bedside tables. He didn't find anything. He looked under the bed, and in the closet. Like all the other rooms in the house, this one was full of computers. Holes had been knocked in walls for the thick sheaves of cables.

I had been standing near a big cardboard drum, one of several in the room. It was about thirty gallon capacity, the kind you ship things in. The lid was loose, so I lifted it. I sort of wished I hadn't.

"Osborne," I said. "You'd better look at this."

The drum was lined with a heavy-duty garbage bag. And it was two-thirds full of Quaaludes.

They pried the lids off the rest of the drums. We found drums of amphetamines, of Nembutals, of Valium. All sorts of things.

With the discovery of the drugs a lot more police returned to the scene. With them came the television camera crews.

In all the activity no one seemed concerned about me, so I slipped back to my own house and locked the door. From time to time I peeked out the curtains. I saw reporters interviewing the neighbors. Hal was there, and seemed to be having a good time. Twice crews knocked on my door, but I didn't answer. Eventually they went away.

I ran a hot bath and soaked in it for about an hour. Then I turned the heat up as high as it would go and got in bed, under the blankets.

I shivered all night.

Osborne came over about nine the next morning. I let him in. Hal followed, looking very unhappy. I realized they had been up all night. I poured coffee for them.

"You'd better read this first," Osborne said, and handed me the sheet of computer printout. I unfolded it, got out my glasses, and started to read.

It was in that awful dot-matrix printing. My policy is to throw

any such trash into the fireplace, un-read, but I made an exception this time.

It was Kluge's will. Some probate court was going to have a lot of fun with it.

He stated again that he didn't exist, so he could have no relatives. He had decided to give all his worldly property to somebody who deserved it.

But who was deserving? Kluge wondered. Well, not Mr. and Mrs. Perkins, four houses down the street. They were child abusers. He cited court records in Buffalo and Miami, and a pending case locally.

Mrs. Radnor and Mrs. Polonski, who lived across the street from each other five houses down, were gossips.

The Anderson's oldest son was a car thief.

Marian Flores cheated on her high school algebra tests.

There was a guy nearby who was diddling the city on a freeway construction project. There was one wife in the neighborhood who made out with door-to-door salesmen, and two having affairs with men other than their husbands. There was a teenage boy who got his girlfriend pregnant, dropped her, and bragged about it to his friends.

There were no fewer than nineteen couples in the immediate area who had not reported income to the IRS, or who had padded their deductions.

Kluge's neighbors in back had a dog that barked all night.

Well, I could vouch for the dog. He'd kept me awake often enough. But the rest of it was *crazy*! For one thing, where did a guy with two hundred gallons of illegal narcotics get the right to judge his neighbors so harshly? I mean, the child abusers were one thing, but was it right to tar a whole family because their son stole cars? And for another . . . how did he *know* some of this stuff?

But there was more. Specifically, four philandering husbands. One was Harold "Hal" Lanier, who for three years had been seeing a woman named Toni Jones, a co-worker at the L.A.P.D. Data Processing facility. She was pressuring him for a divorce; he was "waiting for the right time to tell his wife."

I glanced up at Hal. His red face was all the confirmation I needed.

Then it hit me. What had Kluge found out about *me*?

I hurried down the page, searching for my name. I found it in the last paragraph.

" . . . for thirty years Mr. Apfel has been paying for a mistake

he did not even make. I won't go so far as to nominate him for sainthood, but by default—if for no other reason—I hereby leave all deed and title to my real property and the structure thereon to Victor Apfel."

I looked at Osborne, and those tired eyes were weighing me.

"But I don't *want* it!"

"Do you think this is the reward Kluge mentioned in the phone call?"

"It must be," I said. "What else could it be?"

Osborne sighed, and sat back in his chair. "At least he didn't try to leave you the drugs. Are you still saying you didn't know the guy?"

"Are you accusing me of something?"

He spread his hands. "Mister Apfel, I'm simply asking a question. You're never one hundred percent sure in a suicide. Maybe it was a murder. If it was, you can see that, so far, you're the only one we know of that's gained by it."

"He was almost a stranger to me."

He nodded, tapping his copy of the computer printout. I looked back at my own, wishing it would go away.

"What's this . . . mistake you didn't make?"

I was afraid that would be the next question.

"I was a prisoner of war in North Korea," I said.

Osborne chewed that over for a while.

"They brainwash you?"

"Yes." I hit the arm of my chair, and suddenly had to be up and moving. The room was getting cold. "No. I don't . . . there's been a lot of confusion about that word. Did they 'brainwash' me? Yes. Did they succeed? Did I offer a confession of my war crimes and denounce the U.S. Government? No."

Once more, I felt myself being inspected by those deceptively tired eyes.

"You still seem to have . . . strong feelings about it."

"It's not something you forget."

"Is there anything you want to say about it?"

"It's just that it was all so . . . no. No, I have nothing further to say. Not to you, not to anybody."

"I'm going to have to ask you more questions about Kluge's death."

"I think I'll have my lawyer present for those." Christ. Now I am going to have to get a lawyer. I didn't know where to begin.

Osborne just nodded again. He got up and went to the door.

"I was ready to write this one down as a suicide," he said. "The



only thing that bothered me was there was no note. Now we've got a note." He gestured in the direction of Kluge's house, and started to look angry.

"This guy not only writes a note, he programs the-fucking thing into his computer, complete with special effects straight out of Pac-Man.

"Now, I know people do crazy things. I've seen enough of them. But when I heard the computer playing a hymn, that's when I knew this was murder. Tell you the truth, Mr. Apfel, I don't think you did it. There must be two dozen motives for murder in that printout. Maybe he was blackmailing people around here. Maybe that's how he bought all those machines. And people with that amount of drugs usually die violently. I've got a lot of work to do on this one, and I'll find who did it." He mumbled something about not leaving town, and that he'd see me later, and left.

"Vic . . ." Hal said. I looked at him.

"About that printout," he finally said. "I'd appreciate it . . . well, they said they'd keep it confidential. If you know what I mean." He had eyes like a basset hound. I'd never noticed that before.

"Hal, if you'll just go home, you have nothing to worry about from me."

He nodded, and scuttled for the door.

"I don't think any of that will get out," he said.

It all did, of course.

It probably would have even without the letters that began arriving a few days after Kluge's death, all postmarked Trenton, New Jersey, all computer-generated from a machine no one was ever able to trace. The letters detailed the matters Kluge had mentioned in his will.

I didn't know about any of that at the time. I spent the rest of the day after Hal's departure lying in my bed, under the electric blanket. I couldn't get my feet warm. I got up only to soak in the tub or to make a sandwich.

Reporters knocked on the door but I didn't answer. On the second day I called a criminal lawyer—Martin Abrams, the first in the book—and retained him. He told me they'd probably call me down to the police station for questioning. I told him I wouldn't go, popped two Dilantin, and sprinted for the bed.

A couple of times I heard sirens in the neighborhood. Once I heard a shouted argument down the street. I resisted the temp-

tation to look. I'll admit I was a little curious, but you know what happened to the cat.

I kept waiting for Osborne to return, but he didn't. The days turned into a week. Only two things of interest happened in that time.

The first was a knock on my door. This was two days after Kluge's death. I looked through the curtains and saw a silver Ferrari parked at the curb. I couldn't see who was on the porch, so I asked who it was.

"My name's Lisa Foo," she said. "You asked me to drop by."

"I certainly don't remember it."

"Isn't this Charles Kluge's house?"

"That's next door."

"Oh. Sorry."

I decided I ought to warn her Kluge was dead, so I opened the door. She turned around and smiled at me. It was blinding.

Where does one start in describing Lisa Foo? Remember when newspapers used to run editorial cartoons of Hirohito and Tojo, when the *Times* used the word "Jap" without embarrassment? Little guys with faces wide as footballs, ears like jug handles, thick glasses, two big rabbit buck teeth, and pencil-thin moustaches . . .

Leaving out only the moustache, she was a dead ringer for a cartoon Tojo. She had the glasses, and the ears, and the teeth. But her teeth had braces, like piano keys wrapped in barbed wire. And she was five-eight or five-nine and couldn't have weighed more than a hundred and ten. I'd have said a hundred, but added five pounds each for her breasts, so improbably large on her scrawny frame that all I could read of the message on her T-shirt was "POCK LIVE." It was only when she turned sideways that I saw the esses before and after.

She thrust out a slender hand.

"Looks like I'm going to be your neighbor for a while," she said. "At least until we get that dragon's lair next door straightened out." If she had an accent, it was San Fernando Valley.

"That's nice."

"Did you know him? Kluge, I mean. Or at least that's what he called himself."

"You don't think that was his name?"

"I doubt it. 'Klug' means clever in German. And it's hacker slang for being tricky. And he sure was a tricky bugger. Definitely some glitches in the wetware." She tapped the side of her head meaningfully. "Viruses and phantoms and demons jumping out

every time they try to key in, Software rot, bit buckets overflowing onto the floor . . . ”

She babbled on in that vein for a time. It might as well have been Swahili.

“Did you say there were demons in his computers?”

“That’s right.”

“Sounds like they need an exorcist.”

She jerked her thumb at her chest and showed me another half-acre of teeth.

“That’s me. Listen, I gotta go. Drop in and see me anytime.”

The second interesting event of the week happened the next day. My bank statement arrived. There were three deposits listed. The first was the regular check from the V.A., for \$487.00. The second was for \$392.54, interest on the money my parents had left me fifteen years ago.

The third deposit had come in on the twentieth, the day Charles Kluge died. It was for \$700,083.04.

A few days later Hal Lanier dropped by.

“Boy, what a week,” he said. Then he flopped down on the couch and told me all about it.

There had been a second death on the block. The letters had stirred up a lot of trouble, especially with the police going house to house questioning everyone. Some people had confessed to things when they were sure the cops were closing in on them. The woman who used to entertain salesmen while her husband was at work had admitted her infidelity, and the guy had shot her. He was in the County Jail. That was the worst incident, but there had been others, from fistfights to rocks thrown through windows. According to Hal, the IRS was thinking of setting up a branch office in the neighborhood, so many people were being audited.

I thought about the seven hundred thousand and eighty-three dollars.

And four cents.

I didn’t say anything, but my feet were getting cold.

“I suppose you want to know about me and Betty,” he said, at last. I didn’t. I didn’t want to hear *any* of this, but I tried for a sympathetic expression.

“That’s all over,” he said, with a satisfied sigh. “Between me and Toni, I mean. I told Betty all about it. It was real bad for a few days, but I think our marriage is stronger for it now.” He was quiet for a moment, basking in the warmth of it all. I had kept

a straight face under worse provocation, so I trust I did well enough then.

He wanted to tell me all they'd learned about Kluge, and he wanted to invite me over for dinner, but I begged off on both, telling him my war wounds were giving me hell. I just about had him to the door when Osborne knocked on it. There was nothing to do but let him in. Hal stuck around, too.

I offered Osborne coffee, which he gratefully accepted. He looked different. I wasn't sure what it was at first. Same old tired expression . . . no, it wasn't. Most of that weary look had been either an act or a cop's built-in cynicism. Today it was genuine. The tiredness had moved from his face to his shoulders, to his hands, to the way he walked and the way he slumped in the chair. There was a sour aura of defeat around him.

"Am I still a suspect?" I asked.

"You mean should you call your lawyer? I'd say don't bother. I checked you out pretty good. That will ain't gonna hold up, so your motive is pretty half-assed. Way I figure it, every coke dealer in the Marina had a better reason to snuff Kluge than you." He sighed. "I got a couple questions. You can answer them or not."

"Give it a try."

"You remember any unusual visitors he had? People coming and going at night?"

"The only visitors I *ever* recall were deliveries. Post office. Federal Express, freight companies . . . that sort of thing. I suppose the drugs could have come in any of those shipments."

"That's what we figure, too. There's no way he was dealing nickel and dime bags. He must have been a middle man. Ship it in, ship it out." He brooded about that for a while, and sipped his coffee.

"So are you making any progress?" I asked.

"You want to know the truth? The case is going in the toilet. We've got too many motives, and not a one of them that works. As far as we can tell, nobody on the block had the slightest idea Kluge had all that information. We've checked bank accounts and we can't find evidence of blackmail. So the neighbors are pretty much out of the picture. Though if he were alive, most people around here would like to kill him *now*."

"Damn straight," Hal said.

Osborne slapped his thigh. "If the bastard was alive, *I'd* kill him," he said. "But I'm beginning to think he never *was* alive."

"I don't understand."

"If I hadn't seen the goddam body . . ." He sat up a little

straighter. "He said he didn't exist. Well, he practically didn't. PG&E never heard of him. He's hooked up to their lines and a meter reader came by every month, but they never billed him for a single kilowatt. Same with the phone company. He had a whole exchange in that house that was *made* by the phone company, and delivered by them, and installed by them, but they have no record of him. We talked to the guy who hooked it all up. He turned in his records, and the computer swallowed them. Kluge didn't have a bank account anywhere in California, and apparently he didn't need one. We've tracked down a hundred companies that sold things to him, shipped them out, and then either marked his account paid or forgot they ever sold him anything. Some of them have check numbers and account numbers in their books, for accounts or even *banks* that don't exist."

He leaned back in his chair, simmering at the perfidy of it all.

"The only guy we've found who ever heard of him was the guy who delivered his groceries once a month. Little store down on Sepulveda. They don't have a computer, just paper receipts. He paid by check. Wells Fargo accepted them and the checks never bounced. But Wells Fargo never heard of him."

I thought it over. He seemed to expect something of me at this point, so I made a stab at it.

"He was doing all this by computers?"

"That's right. Now, the grocery store scam I understand, almost. But more often than not, Kluge got right into the basic programming of the computers and wiped himself out. The power company was never paid, by check or any other way, because as far as they were concerned, they weren't selling him anything.

"No government agency has ever heard of him. We've checked him with everybody from the post office to the CIA."

"Kluge was probably an alias, right?" I offered.

"Yeah. But the FBI doesn't have his fingerprints. We'll find out who he was, eventually. But it doesn't get us any closer to whether or not he was murdered."

He admitted there was pressure to simply close the felony part of the case, label it suicide, and forget it. But Osborne would not believe it. Naturally, the civil side would go on for some time, as they attempted to track down all Kluge's deceptions.

"It's all up to the dragon lady," Osborne said. Hal snorted.

"Fat chance," Hal said, and muttered something about boat people.

"That girl? She's still over there? Who is she?"

"She's some sort of giant brain from Cal Tech. We called out

there and told them we were having problems, and she's what they sent." It was clear from Osborne's face what he thought of any help she might provide.

I finally managed to get rid of them. As they went down the walk I looked over at Kluge's house. Sure enough, Lisa Foo's silver Ferrari was sitting in his driveway.

I had no business going over there. I knew that better than anyone.

So I set about preparing my evening meal. I made a tuna casserole—which is not as bland as it sounds, the way I make it—put it in the oven and went out to the garden to pick the makings for a salad. I was slicing cherry tomatoes and thinking about chilling a bottle of white wine when it occurred to me that I had enough for two.

Since I never do anything hastily, I sat down and thought it over for a while. What finally decided me was my feet. For the first time in a week, they were warm. So I went to Kluge's house.

The front door was standing open. There was no screen. Funny how disturbing that can look, the dwelling wide open and unguarded. I stood on the porch and leaned in, but all I could see was the hallway.

"Miss Foo?" I called. There was no answer.

The last time I'd been here I had found a dead man. I hurried in.

Lisa Foo was sitting on a piano bench before a computer console. She was in profile, her back very straight, her brown legs in lotus position, her fingers poised at the keys as words sprayed rapidly onto the screen in front of her. She looked up and flashed her teeth at me.

"Somebody told me your name was Victor Apfel," she said.

"Yes. Uh, the door was open . . ."

"It's hot," she said, reasonably, pinching the fabric of her shirt near her neck and lifting it up and down like you do when you're sweaty. "What can I do for you?"

"Nothing, really." I came into the dimness, and stumbled on something. It was a cardboard box, the large flat kind used for delivering a jumbo pizza.

"I was just fixing dinner, and it looks like there's plenty for two, so I was wondering if you . . ." I trailed off, as I had just noticed something else. I had thought she was wearing shorts. In fact, all she had on was the shirt and a pair of pink bikini underpants. This did not seem to make her uneasy.

" . . . would you like to join me for dinner?"

Her smile grew even broader.

"I'd love to," she said. She effortlessly unwound her legs and bounced to her feet, then brushed past me, trailing the smells of perspiration and sweet soap. "Be with you in a minute."

I looked around the room again but my mind kept coming back to her. She liked Pepsi with her pizza; there were dozens of empty cans. There was a deep scar on her knee and upper thigh. The ashtrays were empty . . . and the long muscles of her calves bunched strongly as she walked. Kluge must have smoked, but Lisa didn't, and she had fine, downy hairs in the small of her back just visible in the green computer light. I heard water running in the bathroom sink, looked at a yellow notepad covered with the kind of penmanship I hadn't seen in decades, and smelled soap and remembered tawny brown skin and an easy stride.

She appeared in the hall, wearing cut-off jeans, sandals, and a new T-shirt. The old one had advertised BURROUGHS OFFICE SYSTEMS. This one featured Mickey Mouse and Snow White's Castle and smelled of fresh bleached cotton. Mickey's ears were laid back on the upper slopes of her incongruous breasts.

I followed her out the door. Tinkerbelle twinkled in pixie dust from the back of her shirt.

"I like this kitchen," she said.

You don't really look at a place until someone says something like that.

The kitchen was a time capsule. It could have been lifted bodily from an issue of *Life* in the early fifties. There was the hump-shouldered Frigidaire, of a vintage when that word had been a generic term, like kleenex or coke. The counter tops were yellow tile, the sort that's only found in bathrooms these days. There wasn't an ounce of Formica in the place. Instead of a dishwasher I had a wire rack and a double sink. There was no electric can opener, Cuisinart, trash compacter, or microwave oven. The newest thing in the whole room was a fifteen-year-old blender.

I'm good with my hands. I like to repair things.

"This bread is terrific," she said.

I had baked it myself. I watched her mop her plate with a crust, and she asked if she might have seconds.

I understand cleaning one's plate with bread is bad manners. Not that I cared; I do it myself. And other than that, her manners were impeccable. She polished off three helpings of my casserole

and when she was done the plate hardly needed washing. I had a sense of ravenous appetite barely held in check.

She settled back in her chair and I re-filled her glass with white wine.

"Are you sure you wouldn't like some more peas?"

"I'd bust." She patted her stomach contentedly. "Thank you so much, Mister Apfel. I haven't had a home-cooked meal in ages."

"You can call me Victor."

"I just love American food."

"I didn't know there was such a thing. I mean, not like Chinese or . . . you *are* American, aren't you?" She just smiled. "What I mean—"

"I know what you meant, Victor. I'm a citizen, but not native-born. Would you excuse me for a moment? I know it's impolite to jump right up, but with these braces I find I have to brush *instantly* after eating."

I could hear her as I cleared the table. I ran water in the sink and started doing the dishes. Before long she joined me, grabbed a dish towel, and began drying the things in the rack, over my protests.

"You live alone here?" she asked.

"Yes. Have ever since my parents died."

"Ever married? If it's none of my business, just say so."

"That's all right. No, I never married."

"You do pretty good for not having a woman around."

"I've had a lot of practice. Can I ask you a question?"

"Shoot."

"Where are you from? Taiwan?"

"I have a knack for languages. Back home, I spoke pidgin American, but when I got here I cleaned up my act. I also speak rotten French, illiterate Chinese in four or five varieties, gutter Vietnamese, and enough Thai to holler, 'Me wanna see American Consul, pretty-damn-quick, you!'"

I laughed. When she said it, her accent was thick.

"I been here eight years now. You figured out where home is?"

"Vietnam?" I ventured.

"The sidewalks of Saigon, fer shure. Or Ho Chi Minh's Shitty, as the pajama-heads re-named it, may their dinks rot off and their butts be filled with jagged punjee-sticks. Pardon my French."

She ducked her head in embarrassment. What had started out light had turned hot very quickly. I sensed a hurt at least as deep as my own, and we both backed off from it.

"I took you for a Japanese," I said.



"Yeah, ain't it a pisser? I'll tell you about it some day. Victor, is that a laundry room through that door there? With an electric washer?"

"That's right."

"Would it be too much trouble if I did a load?"

It was no trouble at all. She had seven pairs of faded jeans, some with the legs cut away, and about two dozen T-shirts. It could have been a load of boys' clothing except for the frilly underwear.

We went into the back yard to sit in the last rays of the setting sun, then she had to see my garden. I'm quite proud of it. When I'm well, I spend four or five hours a day working out there, year-round, usually in the morning hours. You can do that in southern California. I have a small greenhouse I built myself.

She loved it, though it was not in its best shape. I had spent most of the week in bed or in the tub. As a result, weeds were sprouting here and there.

"We had a garden when I was little," she said. "And I spent two years in a rice paddy."

"That must be a lot different than this."

"Damn straight. Put me off rice for *years*."

She discovered an infestation of aphids, so we squatted down to pick them off. She had that double-jointed Asian peasant's way of sitting that I remembered so well and could never imitate. Her fingers were long and narrow, and soon the tips of them were green from squashed bugs.

We talked about this and that. I don't remember quite how it came up, but I told her I had fought in Korea. I learned she was twenty-five. It turned out we had the same birthday, so some months back I had been exactly twice her age.

The only time Kluge's name came up was when she mentioned how she liked to cook. She hadn't been able to at Kluge's house.

"He has a freezer in the garage full of frozen dinners," she said. "He had one plate, one fork, one spoon, and one glass. He's got the best microwave oven on the market. And that's *it*, man. Ain't nothing else in his kitchen at *all*." She shook her head, and executed an aphid. "He was one weird dude."

When her laundry was done it was late evening, almost dark. She loaded it into my wicker basket and we took it out to the clothesline. It got to be a game. I would shake out a T-shirt and study the picture or message there. Sometimes I got it, and some-

times I didn't. There were pictures of rock groups, a map of Los Angeles, Star Trek tie-ins . . . a little of everything.

"What's the L5 Society?" I asked her.

"Guys that want to build these great big farms in space. I asked 'em if they were gonna grow rice, and they said they didn't think it was the best crop for zero gee, so I bought the shirt."

"How many of these things do you have?"

"Wow, it's gotta be four or five hundred. I usually wear 'em two or three times and then put them away."

I picked up another shirt, and a bra fell out. It wasn't the kind of bra girls wore when I was growing up. It was very sheer, though somehow functional at the same time.

"You like, Yank?" Her accent was very thick. "You oughtta see my sister!"

I glanced at her, and her face fell.

"I'm sorry, Victor," she said. "You don't have to blush." She took the bra from me and clipped it to the line.

She must have mis-read my face. True, I had been embarrassed, but I was also pleased in some strange way. It had been a long time since anybody had called me anything but Victor or Mr. Apfel.

The next day's mail brought a letter from a law firm in Chicago. It was about the seven hundred thousand dollars. The money had come from a Delaware holding company which had been set up in 1933 to provide for me in my old age. My mother and father were listed as the founders. Certain long-term investments had matured, resulting in my recent windfall. The amount in my bank was *after* taxes.

It was ridiculous on the face of it. My parents had never had that kind of money. I didn't want it. I would have given it back if I could find out who Kluge had stolen it from.

I decided that, if I wasn't in jail this time next year, I'd give it all to some charity. Save the Whales, maybe, or the L5 Society.

I spent the morning in the garden. Later I walked to the market and bought some fresh ground beef and pork. I was feeling good as I pulled my purchases home in my fold-up wire basket. When I passed the silver Ferrari I smiled.

She hadn't come to get her laundry. I took it off the line and folded it, then knocked on Kluge's door.

"It's me. Victor."

"Come on in, Yank."

She was where she had been before, but decently dressed this time. She smiled at me, then hit her forehead when she saw the laundry basket. She hurried to take it from me.

"I'm sorry, Victor. I meant to get this—"

"Don't worry about it," I said. "It was no trouble. And it gives me the chance to ask if you'd like to dine with me again."

Something happened to her face which she covered quickly. Perhaps she didn't like "American" food as much as she professed to. Or maybe it was the cook.

"Sure, Victor, I'd love to. Let me take care of this. And why don't you open those drapes? It's like a tomb in here."

She hurried away. I glanced at the screen she had been using. It was blank, but for one word: intercourse-p. I assumed it was a typo.

I pulled the drapes open in time to see Osborne's car park at the curb. Then Lisa was back, wearing a new T-shirt. This one said A CHANGE OF HOBBIT, and had a picture of a squat, hairy-footed creature. She glanced out the window and saw Osborne coming up the walk.

"I say, Watson," she said. "It's Lestrade of the Yard. Do show him in."

That wasn't nice of her. He gave me a suspicious glance as he entered. I burst out laughing. Lisa sat on the piano bench, poker-faced. She slumped indolently, one arm resting near the keyboard.

"Well, Apfel," Osborne started. "We've finally found out who Kluge really was."

"Patrick William Gavin," Lisa said.

Quite a time went by before Osborne was able to close his mouth. Then he opened it right up again.

"How the hell did you find that out?"

She lazily caressed the keyboard beside her.

"Well, of course I got it when it came into your office this morning. There's a little stoolie program tucked away in your computer that whispers in my ear every time the name Kluge is mentioned. But I didn't need that. I figured it out five days ago."

"Then why the . . . why didn't you tell me?"

"You didn't ask me."

They glared at each other for a while. I had no idea what events had led up to this moment, but it was quite clear they didn't like each other even a little bit. Lisa was on top just now, and seemed to be enjoying it. Then she glanced at her screen, looked surprised, and quickly tapped a key. The word that had been there vanished. She gave me an inscrutable glance, then faced Osborne again.

"If you recall, you brought me in because all your own guys were getting was a lot of crashes. This system was brain-damaged when I got here, practically catatonic. Most of it was down and your guys couldn't get it up." She had to grin at that.

"You decided I couldn't do any worse than your guys were doing. So you asked me to try and break Kluge's codes without frying the system. Well, I did it. All you had to do was come by and interface and I would have downloaded N tons of wallpaper right in your lap."

Osborne listened quietly. Maybe he even knew he had made a mistake.

"What did you get? Can I see it now?"

She nodded, and pressed a few keys. Words started to fill her screen, and one close to Osborne. I got up and read Lisa's terminal.

It was a brief bio of Kluge/Gavin. He was about my age, but while I was getting shot at in a foreign land, he was cutting a swath through the infant computer industry. He had been there from the ground up, working at many of the top research facilities. It surprised me that it had taken over a week to identify him.

"I compiled this anecdotally," Lisa said, as we read. "The first thing you have to realize about Gavin is that he exists nowhere in any computerized information system. So I called people all over the country—interesting phone system he's got, by the way; it generates a new number for each call, and you can't call back or trace it—and started asking who the top people were in the fifties and sixties. I got a lot of names. After that, it was a matter of finding out who no longer existed in the files. He faked his death in 1967. I located one account of it in a newspaper file. Everybody I talked to who had known him knew of his death. There is a paper birth certificate in Florida. That's the only other evidence I found of him. He was the only guy so many people in the field knew who left no mark on the world. That seemed conclusive to me."

Osborne finished reading, then looked up.

"All right, Ms. Foo. What else have you found out?"

"I've broken some of his codes. I had a piece of luck, getting into a basic rape-and-plunder program he'd written to attack *other* people's programs, and I've managed to use it against a few of his own. I've unlocked a file of passwords with notes on where they came from. And I've learned a few of his tricks. But it's the tip of the iceberg."

She waved a hand at the silent metal brains in the room.

"What I haven't gotten across to anyone is just what this is.

This is the most devious electronic weapon ever devised. It's armored like a battleship. It has to be; there's a lot of very slick programs out there that grab an invader and hang on like a terrier. If they ever got this far Kluge could deflect them. But usually they never even knew they'd been burgled. Kluge'd come in like a cruise missile, low and fast and twisty. And he'd route his attack through a dozen cut-offs.

"He had a lot of advantages. Big systems these days are heavily protected. People use passwords and very sophisticated codes. But Kluge helped *invent* most of them. You need a damn good lock to keep out a locksmith. He helped *install* a lot of the major systems. He left informants behind, hidden in the software. If the codes were changed, the computer *itself* would send the information to a safe system that Kluge could tap later. It's like you buy the biggest, meanest, best-trained watchdog you can. And that night, the guy who *trained* the dog comes in, pats him on the head, and robs you blind."

There was a lot more in that vein. I'm afraid that when Lisa began talking about computers, ninety percent of my head shut off.

"I'd like to know something, Osborne," Lisa said.

"What would that be?"

"What is my status here? Am I supposed to be solving your crime for you, or just trying to get this system back to where a competent user can deal with it?"

Osborne thought it over.

"What worries me," she added, "is that I'm poking around in a lot of restricted data banks. I'm worried about somebody knocking on the door and handcuffing me. *You* ought to be worried, too. Some of these agencies wouldn't like a homicide cop looking into their affairs."

Osborne bridled at that. Maybe that's what she intended.

"What do I have to do?" he snarled. "Beg you to stay?"

"No. I just want your authorization. You don't have to put it in writing. Just say you're behind me."

"Look. As far as L.A. County and the State of California are concerned, this house doesn't exist. There is no lot here. It doesn't appear in the assessor's records. This place is in a legal limbo. If anybody can authorize you to use this stuff, it's me, because I believe a murder was committed in it. So you just keep doing what you've been doing."

"That's not much of a commitment," she mused.

"It's all you're going to get. Now, what else have you got?"

She turned to her keyboard and typed for a while. Pretty soon a printer started, and Lisa leaned back. I glanced at her screen. It said: osculate posterior-p. I remembered that osculate meant kiss. Well, these people have their own language. Lisa looked up at me and grinned.

"Not you," she said, quietly. "*Him*."

I hadn't the faintest notion of what she was talking about.

Osborne got his printout and was ready to leave. Again, he couldn't resist turning at the door for final orders.

"If you find anything to indicate he didn't commit suicide, let me know."

"Okay. He didn't commit suicide."

Osborne didn't understand for a moment.

"I want proof."

"Well, I have it, but you probably can't use it. He didn't write that ridiculous suicide note."

"How do you know that?"

"I knew that my first day here. I had the computer list the program. Then I compared it to Kluge's style. No way he could have written it. It's tighter'n a bug's ass. Not a spare line in it. Kluge didn't pick his alias for nothing. You know what it means?"

"Clever," I said.

"Literally. But it means . . . a Rube Goldberg device. Something overly complex. Something that works, but for the wrong reason. You 'kluge around' bugs in a program. It's the hacker's vaseline."

"So?" Osborne wanted to know.

"So Kluge's programs were really crocked. They were full of bells and whistles he never bothered to clean out. He was a genius, and his programs worked, but you wonder why they did. Routines so bletcherous they'd make your skin crawl. Real crusty bagbiters. But good programming's so rare, even his diddles were better than most people's super-moby hacks."

I suspect Osborne understood about as much of that as I did.

"So you base your opinion on his programming style."

"Yeah. Unfortunately, it's gonna be ten years or so before that's admissable in court, like graphology or fingerprints. But if you know anything about programming you can look at it and see it. Somebody else wrote that suicide note—somebody damn good, by the way. That program called up his last will and testament as a sub-routine. And he definitely *did* write that. It's got his fingerprints all over it. He spent the last five years spying on the neighbors as a hobby. He tapped into military records, school

records, work records, tax files and bank accounts. And he turned every telephone for three blocks into a listening device. He was one hell of a snoop."

"Did he mention anywhere why he did that?" Osborne asked.

"I think he was more than half crazy. Possibly he was suicidal. He sure wasn't doing himself any good with all those pills he took. But he was preparing himself for death, and Victor was the only one he found worthy of leaving it all to. I'd have *believed* he committed suicide if not for that note. But he didn't write it. I'll swear to that."

We eventually got rid of him, and I went home to fix the dinner. Lisa joined me when it was ready. Once more she had a huge appetite.

I fixed lemonade and we sat on my small patio and watched evening gather around us.

I woke up in the middle of the night, sweating. I sat up, thinking it out, and I didn't like my conclusions. So I put on my robe and slippers and went over to Kluge's.

The front door was open again. I knocked anyway. Lisa stuck her head around the corner.

"Victor? Is something wrong?"

"I'm not sure," I said. "May I come in?"

She gestured, and I followed her into the living room. An open can of Pepsi sat beside her console. Her eyes were red as she sat on her bench.

"What's up?" she said, and yawned.

"You should be asleep, for one thing," I said.

She shrugged, and nodded.

"Yeah. I can't seem to get in the right phase. Just now I'm in day mode. But Victor, I'm used to working odd hours, and long hours, and you didn't come over here to lecture me about that, did you?"

"No. You say Kluge was murdered."

"He didn't write his suicide note. That seems to leave murder."

"I was wondering why someone would kill him. He never left the house, so it was for something he did here with his computers. And now you're . . . well, I don't know *what* you're doing, frankly, but you seem to be poking into the same things. Isn't there a danger the same people will come after you?"

"People?" She raised an eyebrow.

I felt helpless. My fears were not well-formed enough to make sense.

"I don't know . . . you mentioned agencies . . ."

"You notice how impressed Osborne was with that? You think there's some kind of conspiracy Kluge tumbled to, or you think the CIA killed him because he found out too much about something, or—"

"I don't know, Lisa. But I'm worried the same thing could happen to you."

Surprisingly, she smiled at me.

"Thank you so much, Victor. I wasn't going to admit it to Osborne, but I've been worried about that, too."

"Well, what are you going to do?"

"I want to stay here and keep working. So I gave some thought to what I could do to protect myself. I decided there wasn't anything."

"Surely there's something."

"Well, I got a gun, if that's what you mean. But think about it. Kluge was offed in the middle of the day. Nobody saw anybody enter or leave the house. So I asked myself, who can walk into a house in broad daylight, shoot Kluge, program that suicide note, and walk away, leaving no traces he'd ever been there?"

"Somebody very good."

"Goddam good. So good there's not much chance one little gook's gonna be able to stop him if he decides to waste her."

She shocked me, both by her words and by her apparent lack of concern for her own fate. But she had said she was worried.

"Then you have to stop this. Get out of here."

"I won't be pushed around that way," she said. There was a tone of finality to it. I thought of things I might say, and rejected them all.

"You could at least . . . lock your front door," I concluded, lamely.

She laughed, and kissed my cheek.

"I'll do that, Yank. And I appreciate your concern. I really do."

I watched her close the door behind me, listened to her lock it, then trudged through the moonlight toward my house. Halfway there I stopped. I could suggest she stay in my spare bedroom. I could offer to stay with her at Kluge's.

No, I decided. She would probably take that the wrong way.

I was back in bed before I realized, with a touch of chagrin and more than a little disgust at myself, that she had every reason to take it the wrong way.

And me exactly twice her age.

\* \* \*



I spent the morning in the garden, planning the evening's menu. I have always liked to cook, but dinner with Lisa had rapidly become the high point of my day. Not only that, I was already taking it for granted. So it hit me hard, around noon, when I looked out the front and saw her car gone.

I hurried to Kluge's front door. It was standing open. I made a quick search of the house. I found nothing until the master bedroom, where her clothes were stacked neatly on the floor.

Shivering, I pounded on the Laniers' front door. Betty answered, and immediately saw my agitation.

"The girl at Kluge's house," I said. "I'm afraid something's wrong. Maybe we'd better call the police."

"What happened?" Betty asked, looking over my shoulder. "Did she call you? I see she's not back yet."

"Back?"

"I saw her drive away about an hour ago. That's quite a car she has."

Feeling like a fool, I tried to make nothing of it, but I caught a look in Betty's eye. I think she'd have liked to pat me on the head. It made me furious.

But she'd left her clothes, so surely she was coming back.

I kept telling myself that, then went to run a bath, as hot as I could stand it.

When I answered the door she was standing there with a grocery bag in each arm and her usual blinding smile on her face.

"I wanted to do this yesterday but I forgot until you came over, and I know I should have asked first, but then I wanted to surprise you, so I just went to get one or two items you didn't have in your garden and a couple of things that weren't in your spice rack . . ."

She kept talking as we unloaded the bags in the kitchen. I said nothing. She was wearing a new T-shirt. There was a big V, and under it a picture of a screw, followed by a hyphen and a small case "p." I thought it over as she babbled on. V, screw-p. I was determined not to ask what it meant.

"Do you like Vietnamese cooking?"

I looked at her, and finally realized she was very nervous.

"I don't know," I said. "I've never had it. But I like Chinese, and Japanese, and Indian. I like to try new things." The last part was a lie, but not as bad as it might have been. I do try new recipes, and my tastes in food are catholic. I didn't expect to have much trouble with southeast Asian cuisine.

"Well, when I get through you *still* won't know," she laughed.

"My momma was half-Chinese. So what you're gonna get here is a mongrel meal." She glanced up, saw my face, and laughed.

"I forgot. You've been to Asia. No, Yank, I ain't gonna serve any dog meat."

There was only one intolerable thing, and that was the chopsticks. I used them for as long as I could, then put them aside and got a fork.

"I'm sorry," I said. "Chopsticks happen to be a problem for me."

"You use them very well."

"I had plenty of time to learn how."

It was very good, and I told her so. Each dish was a revelation, not quite like anything I had ever had. Toward the end, I broke down halfway.

"Does the V stand for victory?" I asked.

"Maybe."

"Beethoven? Churchill? World War Two?"

She just smiled.

"Think of it as a challenge, Yank."

"Do I frighten you, Victor?"

"You did at first."

"It's my face, isn't it?"

"It's a generalized phobia of Orientals. I suppose I'm a racist. Not because I want to be."

She nodded slowly, there in the dark. We were on the patio again, but the sun had gone down a long time ago. I can't recall what we had talked about for all those hours. It had kept us busy, anyway.

"I have the same problem," she said.

"Fear of Orientals?" I had meant it as a joke.

"Of Cambodians." She let me take that in for a while, then went on. "When Saigon fell, I fled to Cambodia. It took me two years with stops when the Khmer Rouge put me in labor camps. I'm lucky to be alive, really."

"I thought they called it Kampuchea now."

She spat. I'm not even sure she was aware she had done it.

"It's the People's Republic of Syphilitic Dogs. The North Koreans treated you very badly, didn't they, Victor?"

"That's right."

"Koreans are pus suckers." I must have looked surprised, because she chuckled.

"You Americans feel so guilty about racism. As if you had

invented it and nobody else—except maybe the South Africans and the Nazis—had ever practiced it as heinously as you. And you can't tell one yellow face from another, so you think of the yellow races as one homogeneous block. When in fact orientals are among the most racist peoples on the earth. The Vietnamese have hated the Cambodians for a thousand years. The Chinese hate the Japanese. The Koreans hate everybody. And *everybody* hates the 'ethnic Chinese.' The Chinese are the Jews of the east."

"I've heard that."

She nodded, lost in her own thoughts.

"And I hate all Cambodians," she said, at last. "Like you, I don't wish to. Most of the people who suffered in the camps were Cambodians. It was the genocidal leaders, the Pol Pot scum, who I should hate." She looked at me. "But sometimes we don't get a lot of choice about things like that, do we, Yank?"

The next day I visited her at noon. It had cooled down, but was still warm in her dark den. She had not changed her shirt.

She told me a few things about computers. When she let me try some things on the keyboard I quickly got lost. We decided I needn't plan on a career as a computer programmer.

One of the things she showed me was called a telephone modem, whereby she could reach other computers all over the world. She "interfaced" with someone at Stanford who she had never met, and who she knew only as "Bubble Sorter." They typed things back and forth at each other.

At the end, Bubble Sorter wrote "bye-p." Lisa typed T.

"What's T?" I asked.

"True. Means yes, but yes would be too straightforward for a hacker."

"You told me what a byte is. What's a byep?"

She looked up at me seriously.

"It's a question. Add p to a word, and make it a question. So bye-p means Bubble Sorter was asking if I wanted to log out. Sign off."

I thought that over.

"So how would you translate 'osculate posterior-p'?"

"'You wanna kiss my ass?' But remember, that was for Osborne."

I looked at her T-shirt again, then up to her eyes, which were quite serious and serene. She waited, hands folded in her lap.

Intercourse-p.

"Yes," I said. "I would."

She put her glasses on the table and pulled her shirt over her head.

We made love in Kluge's big waterbed.

I had a certain amount of performance anxiety—it had been a long, *long* time. After that, I was so caught up in the touch and smell and taste of her that I went a little crazy. She didn't seem to mind.

At last we were done, and bathed in sweat. She rolled over, stood, and went to the window. She opened it, and a breath of air blew over me. Then she put one knee on the bed, leaned over me, and got a pack of cigarettes from the bedside table. She lit one.

"I hope you're not allergic to smoke," she said.

"No. My father smoked. But I didn't know you did."

"Only afterwards," she said, with a quick smile. She took a deep drag. "Everybody in Saigon smoked, I think." She stretched out on her back beside me and we lay like that, soaking wet, holding hands. She opened her legs so one of her bare feet touched mine. It seemed enough contact. I watched the smoke rise from her right hand.

"I haven't felt warm in thirty years," I said. "I've been hot, but I've never been warm. I feel warm now."

"Tell me about it," she said.

So I did, as much as I could, wondering if it would work this time. At thirty years remove, my story does not sound so horrible. We've seen so much in that time. There were people in jails at that very moment, enduring conditions as bad as any I encountered. The paraphernalia of oppression is still pretty much the same. Nothing physical happened to me that would account for thirty years lived as a recluse.

"I *was* badly injured," I told her. "My skull was fractured. I still have . . . problems from that. Korea can get very cold, and I was never warm enough. But it was the other stuff. What they call brainwashing now.

"We didn't know what it was. We couldn't understand that even after a man had told them all he knew they'd keep on at us. Keeping us awake. Disorienting us. Some guys signed confessions, made up all sorts of stuff, but even that wasn't enough. They'd just keep on at you.

"I never did figure it out. I guess I couldn't understand an evil that big. But when they were sending us back and some of the prisoners wouldn't go . . . they really didn't *want* to go, they really believed . . ."

I had to pause there. Lisa sat up, moved quietly to the end of the bed, and began massaging my feet.

"We got a taste of what the Vietnam guys got, later. Only for us it was reversed. The G.I.'s were heroes, and the prisoners were . . ."

"You didn't break," she said. It wasn't a question.

"No, I didn't."

"That would be worse."

I looked at her. She had my foot pressed against her flat belly, holding me by the heel while her other hand massaged my toes.

"The country was shocked," I said. "They didn't understand what brainwashing was. I tried telling people how it was. I thought they were looking at me funny. After a while, I stopped talking about it. And I didn't have anything else to talk about."

"A few years back the Army changed its policy. Now they don't expect you to withstand psychological conditioning. It's understood you can say anything or sign anything."

She just looked at me, kept massaging my foot, and nodded slowly. Finally she spoke.

"Cambodia was hot," she said. "I kept telling myself when I finally got to the U.S. I'd live in Maine or someplace, where it snowed. And I did go to Cambridge, but I found out I didn't like snow."

She told me about it. The last I heard, a million people had died over there. It was a whole country frothing at the mouth and snapping at anything that moved. Or like one of those sharks you read about that, when its guts are ripped out, bends in a circle and starts devouring itself.

She told me about being forced to build a pyramid of severed heads. Twenty of them working all day in the hot sun finally got it ten feet high before it collapsed. If any of them stopped working, their own heads were added to the pile.

"It didn't mean anything to me. It was just another job. I was pretty crazy by then. I didn't start to come out of it until I got across the Thai border."

That she had survived it at all seemed a miracle. She had gone through more horror than I could imagine. And she had come through it in much better shape. It made me feel small. When I was her age, I was well on my way to building the prison I have lived in ever since. I told her that.

"Part of it is preparation," she said, wryly. "What you expect out of life, what your life has been so far. You said it yourself. Korea was new to you. I'm not saying I was ready for Cambodia,

but my life up to that point hadn't been what you'd call sheltered. I hope you haven't been thinking I made a living in the streets by selling apples."

She kept rubbing my feet, staring off into scenes I could not see.

"How old were you when your mother died?"

"She was killed during Tet, 1968. I was ten."

"By the Viet Cong?"

"Who knows? Lot of bullets flying, lot of grenades being thrown."

She sighed, dropped my foot, and sat there, a scrawny Buddha without a robe.

"You ready to do it again, Yank?"

"I don't think I can, Lisa. I'm an old man."

She moved over me and lowered herself with her chin just below my sternum, settling her breasts in the most delicious place possible.

"We'll see," she said, and giggled. "There's an alternative sex act I'm pretty good at, and I'm pretty sure it would make you a young man again. But I haven't been able to do it for about a year on account of these." She tapped her braces. "It'd be sort of like sticking it in a buzz saw. So now I do this instead. I call it 'touring the silicone valley.'" She started moving her body up and down, just a few inches at a time. She blinked innocently a couple times, then laughed.

"At last, I can see you," she said. "I'm awfully myopic."

I let her do that for a while, then lifted my head.

"Did you say silicone?"

"Uh-huh. You didn't think they were real, did you?"

I confessed that I had.

"I don't think I've ever been so happy with anything I ever bought. Not even the car."

"Why did you?"

"Does it bother you?"

It didn't, and I told her so. But I couldn't conceal my curiosity.

"Because it was safe to. In Saigon I was always angry that I never developed. I could have made a good living as a prostitute, but I was always too tall, too skinny, and too ugly. Then in Cambodia I was lucky. I managed to pass for a boy some of the time. If not for that I'd have been raped a lot more than I was. And in Thailand I knew I'd get to the West one way or another, and when I got there, I'd get the best car there was, eat anything I wanted any time I wanted to, and purchase the best tits money could buy.

You can't imagine what the West looks like from the camps. A place where you can buy tits!"

She looked down between them, then back at my face.

"Looks like it was a good investment," she said.

"They do seem to work okay," I had to admit.

We agreed that she would spend the nights at my house. There were certain things she had to do at Kluge's, involving equipment that had to be physically loaded, but many things she could do with a remote terminal and an armload of software. So we selected one of Kluge's best computers and about a dozen peripherals and installed her at a cafeteria table in my bedroom.

I guess we both knew it wasn't much protection if the people who got Kluge decided to get her. But I know I felt better about it, and I think she did, too.

The second day she was there a delivery van pulled up outside, and two guys started unloading a king-size waterbed. She laughed and laughed when she saw my face.

"Listen, you're not using Kluge's computers to—"

"Relax, Yank. How'd you think I could afford a Ferrari?"

"I've been curious."

"If you're really good at writing software you can make a lot of money. I own my own company. But every hacker picks up tricks here and there. I used to run a few Kluge scams, myself."

"But not anymore?"

She shrugged. "Once a thief, always a thief, Victor. I told you I couldn't make ends meet selling my bod."

Lisa didn't need much sleep.

We got up at seven, and I made breakfast every morning. Then we would spend an hour or two working in the garden. She would go to Kluge's and I'd bring her a sandwich at noon, then drop in on her several times during the day. That was for my own peace of mind; I never stayed more than a minute. Sometime during the afternoon I would shop or do household chores, then at seven one of us would cook dinner. We alternated. I taught her "American" cooking, and she taught me a little of everything. She complained about the lack of vital ingredients in American markets. No dogs, of course, but she claimed to know great ways of preparing monkey, snake, and rat. I never knew how hard she was pulling my leg, and didn't ask.

After dinner she stayed at my house. We would talk, make love, bathe.

She loved my tub. It is about the only alteration I have made in the house, and my only real luxury. I put it in—having to expand the bathroom to do so—in 1975, and never regretted it. We would soak for twenty minutes or an hour, turning the jets and bubblers on and off, washing each other, giggling like kids. Once we used bubble bath and made a mountain of suds four feet high, then destroyed it, splashing water all over the place. Most nights she let me wash her long black hair.

She didn't have any bad habits—or at least none that clashed with mine. She was neat and clean, changing her clothes twice a day and never so much as leaving a dirty glass on the sink. She never left a mess in the bathroom. Two glasses of wine was her limit.

I felt like Lazarus.

Osborne came by three times in the next two weeks. Lisa met him at Kluge's and gave him what she had learned. It was getting to be quite a list.

"Kluge once had an account in a New York bank with nine *trillion* dollars in it," she told me after one of Osborne's visits. "I think he did it just to see if he could. He left it in for one day, took the interest and fed it to a bank in the Bahamas, then destroyed the principal. Which never existed anyway."

In return, Osborne told her what was new on the murder investigation—which was nothing—and on the status of Kluge's property, which was chaotic. Various agencies had sent people out to look the place over. Some FBI men came, wanting to take over the investigation. Lisa, when talking about computers, had the power to cloud men's minds. She did it first by explaining exactly what she was doing, in terms so abstruse that no one could understand her. Sometimes that was enough. If it wasn't, if they started to get tough, she just moved out of the driver's seat and let them try to handle Kluge's contraption. She let them watch in horror as dragons leaped out of nowhere and ate up all the data on a disc, then printed "You Stupid Putz!" on the screen.

"I'm cheating them," she confessed to me. "I'm giving them stuff I *know* they're gonna step in, because I already stepped in it myself. I've lost about forty percent of the data Kluge had stored away. But the others lose a hundred percent. You ought to see their faces when Kluge drops a logic bomb into their work. That second guy threw a three thousand printer clear across the room. Then tried to bribe me to be quiet about it."

When some federal agency sent out an expert from Stanford,



and he seemed perfectly content to destroy everything in sight in the firm belief that he was *bound* to get it right sooner or later, Lisa showed him how Kluge entered the IRS main computer in Washington and neglected to mention how Kluge had gotten out. The guy tangled with some watchdog program. During his struggles, it seemed he had erased all the tax records from the letter S down into the W's. Lisa let him think that for half an hour.

"I thought he was having a heart attack," she told me. "All the blood drained out of his face and he couldn't talk. So I showed him where I had—with my usual foresight—arranged for that data to be recorded, told him how to put it back where he found it, and how to pacify the watchdog. He couldn't get out of that house fast enough. Pretty soon he's gonna realize you *can't* destroy that much information with anything short of dynamite because of the backups and the limits of how much can be running at any one time. But I don't think he'll be back."

"It sounds like a very fancy video game," I said.

"It is, in a way. But it's more like Dungeons and Dragons. It's an endless series of closed rooms with dangers on the other side. You don't dare take it a step at a time. You take it a *hundredth* of a step at a time. Your questions are like, 'Now this isn't a question, but if it entered my mind to *ask* this question—which I'm not about to do—concerning what might happen if I looked at this door here—and I'm not touching it, I'm not even in the next room—what do you suppose you might do?' And the program crunches on that, decides if you fulfilled the conditions for getting a great big cream pie in the face, then either throws it or allows as how it *might* just move from step A to step A Prime. Then you say, 'Well, maybe I *am* looking at that door.' And sometimes the program says 'You looked, you looked, you dirty crook!' And the fireworks start."

Silly as all that sounds, it was very close to the best explanation she was ever able to give me about what she was doing.

"Are you telling everything, Lisa?" I asked her.

"Well, not *everything*. I didn't mention the four cents."

Four cents? Oh my god.

"Lisa, I didn't want that, I didn't ask for it, I wish he'd never—"

"Calm down, Yank. It's going to be all right."

"He kept records of all that, didn't he?"

"That's what I spend most of my time doing. Decoding his records."

"How long have you known?"

"About the seven hundred thousand dollars? It was in the first disc I cracked."

"I just want to give it back."

She thought that over, and shook her head.

"Victor, it'd be more dangerous to get rid of it now than it would be to keep it. It was imaginary money at first. But now it's got a history. The IRS thinks it knows where it came from. The taxes are paid on it. The State of Delaware is convinced that a legally chartered corporation disbursed it. An Illinois law firm has been paid for handling it. Your bank has been paying you interest on it. I'm not saying it would be impossible to go back and wipe all that out, but I wouldn't like to try. I'm good, but I don't have Kluge's touch."

"How could he *do* all that? You say it was imaginary money. That's not the way I thought money worked. He could just pull it out of thin air?"

Lisa patted the top of her computer console, and smiled at me.

"This is money, Yank," she said, and her eyes glittered.

At night she worked by candlelight so she wouldn't disturb me. That turned out to be my downfall. She typed by touch, and needed the candle only to locate software.

So that's how I'd go to sleep every night, looking at her slender body bathed in the glow of the candle. I was always reminded of melting butter dripping down a roasted ear of corn. Golden light on golden skin.

Ugly, she had called herself. Skinny. It was true she was thin. I could see her ribs when she sat with her back impossibly straight, her tummy sucked in, her chin up. She worked in the nude these days, sitting in lotus position. For long periods she would not move, her hands lying on her thighs, then she would poise, as if to pound the keys. But her touch was light, almost silent. It looked more like yoga than programming. She said she went into a meditative state for her best work.

I had expected a bony angularity, all sharp elbows and knees. She wasn't like that. I had guessed her weight ten pounds too low, and still didn't know where she put it. But she was soft and rounded, and strong beneath.

No one was ever going to call her face glamorous. Few would even go so far as to call her pretty. The braces did that, I think. They caught the eye and held it, drawing attention to that unsightly jumble.

But her skin was wonderful. She had scars. Not as many as I had expected. She seemed to heal quickly, and well.

I thought she was beautiful.

I had just completed my nightly survey when my eye was caught by the candle. I looked at it, then tried to look away.

Candles do that sometimes. I don't know why. In still air, with the flame perfectly vertical, they begin to flicker. The flame leaps up then squats down, up and down, up and down, brighter and brighter in regular rhythm, two or three beats to the second—

—and I tried to call out to her, wishing the candle would stop its regular flickering, but already I couldn't speak—

—I could only gasp, and I tried once more, as hard as I could, to yell, to scream, to tell her not to worry, and felt the nausea building . . .

I tasted blood. I took an experimental breath, did not find the smells of vomit, urine, feces. The overhead lights were on.

Lisa was on her hands and knees leaning over me, her face very close. A tear dropped on my forehead. I was on the carpet, on my back.

"Victor, can you hear me?"

I nodded. There was a spoon in my mouth. I spit it out.

"What happened? Are you going to be all right?"

I nodded again, and struggled to speak.

"You just lie there. The ambulance is on its way."

"No. Don't need it."

"Well, it's on its way. You just take it easy and—"

"Help me up."

"Not yet. You're not ready."

She was right. I tried to sit up, and fell back quickly. I took deep breaths for a while. Then the doorbell rang.

She stood up and started to the door. I just managed to get my hand around her ankle. Then she was leaning over me again, her eyes as wide as they would go.

"What is it? What's wrong now?"

"Get some clothes on," I told her. She looked down at herself, surprised.

"Oh. Right."

She got rid of the ambulance crew. Lisa was a lot calmer after she made coffee and we were sitting at the kitchen table. It was one o'clock, and I was still pretty rocky. But it hadn't been a bad one.

I went to the bathroom and got the bottle of Dilantin I'd hidden when she moved in. I let her see me take one.

"I forgot to do this today," I told her.

"It's because you hid them. That was stupid."

"I know." There must have been something else I could have said. It didn't please me to see her look hurt. But she was hurt because I wasn't defending myself against her attack, and that was a bit too complicated for me to dope out just after a grand mal.

"You can move out if you want to," I said. I was in rare form.

So was she. She reached across the table and shook me by the shoulders. She glared at me.

"I won't take a lot more of that kind of shit," she said, and I nodded, and began to cry.

She let me do it. I think that was probably best. She could have babied me, but I do a pretty good job of that myself.

"How long has this been going on?" she finally said. "Is that why you've stayed in your house for thirty years?"

I shrugged. "I guess it's part of it. When I got back they operated, but it just made it worse."

"Okay. I'm mad at you because you didn't tell me about it, so I didn't know what to do. I want to stay, but you'll have to tell me how. Then I won't be mad anymore."

I could have blown the whole thing right there. I'm amazed I didn't. Through the years I'd developed very good methods for doing things like that. But I pulled through when I saw her face. She really did want to stay. I didn't know why, but it was enough.

"The spoon was a mistake," I said. "If there's time, and if you can do it without risking your fingers, you could jam a piece of cloth in there. Part of a sheet, or something. But nothing hard." I explored my mouth with a finger. "I think I broke a tooth."

"Serves you right," she said. I looked at her, and smiled, then we were both laughing. She came around the table and kissed me, then sat on my knee.

"The biggest danger is drowning. During the first part of the seizure, all my muscles go rigid. That doesn't last long. Then they all start contracting and relaxing at random. It's *very* strong."

"I know. I watched, and I tried to hold you."

"Don't do that. Get me on my side. Stay behind me, and watch out for flailing arms. Get a pillow under my head if you can. Keep me away from things I could injure myself on." I looked her square in the eye. "I want to emphasize this. Just *try* to do all those things. If I'm getting too violent, it's better you stand off to the

side. Better for both of us. If I knock you out, you won't be able to help me if I start strangling on vomit."

I kept looking at her eyes. She must have read my mind, because she smiled slightly.

"Sorry, Yank. I am not freaked out. I mean, like, it's totally gross, you know, and it barfs me out to the max, you could—"

"—gag me with a spoon, I know. Okay, right, I know I was dumb. And that's about it. I might bite my tongue or the inside of my cheek. Don't worry about it. There is one more thing."

She waited, and I wondered how much to tell her. There wasn't a lot she could do, but if I died on her I didn't want her to feel it was her fault.

"Sometimes I have to go to the hospital. Sometimes one seizure will follow another. If that keeps up for too long, I won't breathe, and my brain will die of oxygen starvation."

"That only takes about five minutes," she said, alarmed.

"I know. It's only a problem if I start having them frequently, so we could plan for it if I do. But if I don't come out of one, start having another right on the heels of the first, or if you can't detect any breathing for three or four minutes, you'd better call an ambulance."

"Three or four minutes? You'd be dead before they got here."

"It's that or live in a hospital. I don't like hospitals."

"Neither do I."

The next day she took me for a ride in her Ferrari. I was nervous about it, wondering if she was going to do crazy things. If anything, she was too slow. People behind her kept honking. I could tell she hadn't been driving long from the exaggerated attention she put into every movement.

"A Ferrari is wasted on me, I'm afraid," she confessed at one point. "I never drive it faster than fifty-five."

We went to an interior decorator in Beverly Hills and she bought a low-watt gooseneck lamp at an outrageous price.

I had a hard time getting to sleep that night. I suppose I was afraid of having another seizure, though Lisa's new lamp wasn't going to set it off.

Funny about seizures. When I first started having them, everyone called them fits. Then, gradually, it was seizures, until fits began to sound dirty.

I guess it's a sign of growing old, when the language changes on you.

There were rafts of new words. A lot of them were for things that didn't even exist when I was growing up. Like software. I always visualized a limp wrench.

"What got you interested in computers, Lisa?" I asked her.

She didn't move. Her concentration when sitting at the machine was pretty damn good. I rolled onto my back and tried to sleep.

"It's where the power is, Yank." I looked up. She had turned to face me.

"Did you pick it all up since you got to America?"

"I had a head start. I didn't tell you about my Captain, did I?"

"I don't think you did."

"He was strange. I knew that. I was about fourteen. He was an American, and he took an interest in me. He got me a nice apartment in Saigon. And he put me in school."

She was studying me, looking for a reaction. I didn't give her one.

"He was surely a pedophile, and probably had homosexual tendencies, since I looked so much like a skinny little boy."

Again the wait. This time she smiled.

"He was good to me. I learned to read well. From there on, anything is possible."

"I didn't actually ask you about your Captain. I asked why you got interested in computers."

"That's right. You did."

"Is it just a living?"

"It started that way. It's the future, Victor."

"God knows I've read that enough times."

"It's true. It's already here. It's power, if you know how to use it. You've seen what Kluge was able to do. You can make money with one of these things. I don't mean earn it, I mean *make* it, like if you had a printing press. Remember Osborne mentioned that Kluge's house didn't exist? Did you think what that means?"

"That he wiped it out of the memory banks."

"That was the first step. But the lot exists in the county plat books, wouldn't you think? I mean, this country hasn't *entirely* given up paper."

"So the county really does have a record of that house."

"No. That page was torn out of the records."

"I don't get it. Kluge never left the house."

"Oldest way in the world, friend. Kluge looked through the L.A.P.D. files until he found a guy known as Sammy. He sent him a cashier's check for a thousand dollars, along with a letter saying he could earn twice that if he'd go to the hall of records

and do something. Sammy didn't bite, and neither did McGee, or Molly Unger. But Little Billy Phipps did, and he got a check just like the letter said, and he and Kluge had a wonderful business relationship for many years. Little Billy drives a new Cadillac now, and hasn't the faintest notion who Kluge was or where he lived. It didn't matter to Kluge how much he spent. He just pulled it out of thin air."

I thought that over for a while. I guess it's true that with enough money you can do just about anything, and Kluge had all the money in the world.

"Did you tell Osborne about Little Billy?"

"I erased that disc, just like I erased your seven hundred thousand. You never know when you might need somebody like Little Billy."

"You're not afraid of getting into trouble over it?"

"Life is risk, Victor. I'm keeping the best stuff for myself. Not because I intend to use it, but because if I ever needed it badly and didn't have it, I'd feel like such a fool."

She cocked her head and narrowed her eyes, which made them practically disappear.

"Tell me something, Yank. Kluge picked you out of all your neighbors because you'd been a Boy Scout for thirty years. How do you react to what I'm doing?"

"You're cheerfully amoral, and you're a survivor, and you're basically decent. And I pity anybody who gets in your way."

She grinned, stretched, and stood up.

"'Cheerfully amoral.' I like that." She sat beside me, making a great sloshing in the bed. "You want to be amoral again?"

"In a little bit." She started rubbing my chest. "So you got into computers because they were the wave of the future. Don't you ever worry about them . . . I don't know, I guess it sounds corny . . . do you think they'll take over?"

"Everybody thinks that until they start to use them," she said. "You've got to realize just how stupid they are. Without programming they are good for nothing, literally. Now, what I do believe is that the people who *run* the computers will take over. They already have. That's why I study them."

"I guess that's not what I meant. Maybe I can't say it right."

She frowned. "Kluge was looking into something. He'd been eavesdropping in artificial intelligence labs, and reading a lot of neurological research. I think he was trying to find a common thread."

"Between human brains and computers?"

"Not quite. He was thinking of computers and neurons. Brain cells." She pointed to her computer. "That thing, or any other computer, is light-years away from being a human brain. It can't generalize, or infer, or categorize, or invent. With good programming it can appear to do some of those things, but it's an illusion.

"There's an old speculation about what would happen if we finally built a computer with as many transistors as the human brain has neurons. Would there be a self-awareness? I think that's baloney. A transistor isn't a neuron, and a quintillion of them aren't any better than a dozen.

"So Kluge—who seems to have felt the same way—started looking into the possible similarities between a neuron and an 8-bit computer. That's why he had all that consumer junk sitting around his house, those Trash-80's and Atari's and TT's and Sinclair's, for chrissake. He was used to *much* more powerful instruments. He ate up the home units like candy."

"What did he find out?"

"Nothing, it looks like. An 8-bit unit is more complex than a neuron, and no computer is in the same galaxy as an organic brain. But see, the words get tricky. I said an Atari is more complex than a neuron, but it's hard to really compare them. It's like comparing a direction with a distance, or a color with a mass. The units are different. Except for one similarity."

"What's that?"

"The connections. Again, it's different, but the concept of networking is the same. A neuron is connected to a lot of others. There are trillions of them, and the way messages pulse through them determines what we are and what we think and what we remember. And with that computer I can reach a million others. It's bigger than the human brain, really, because the information in that network is more than all humanity could cope with in a million years. It reaches from Pioneer Ten, out beyond the orbit of Pluto, right into every living room that has a telephone in it. With that computer you can tap tons of data that has been collected but nobody's even had the time to look at.

"That's what Kluge was interested in. The old 'critical mass computer' idea, the computer that becomes aware, but with a new angle. Maybe it wouldn't be the size of the computer, but the *number* of computers. There used to be thousands of them. Now there's millions. They're putting them in cars. In wristwatches. Every home has several, from the simple timer on a microwave oven up to a video game or home terminal. Kluge was trying to find out if critical mass could be reached that way."



"What did he think?"

"I don't know. He was just getting started." She glanced down at me. "But you know what, Yank? I think you've reached critical mass while I wasn't looking."

"I think you're right." I reached for her.

Lisa liked to cuddle. I didn't, at first, after fifty years of sleeping alone. But I got to like it pretty quickly.

That's what we were doing when we resumed the conversation we had been having. We just lay in each others' arms and talked about things. Nobody had mentioned love yet, but I knew I loved her. I didn't know what to do about it, but I would think of something.

"Critical mass," I said. She nuzzled my neck, and yawned.

"What about it?"

"What would it be like? It seems like it would be such a vast intelligence. So quick, so omniscient. God-like."

"Could be."

"Wouldn't it . . . run our lives? I guess I'm asking the same questions I started off with. Would it take over?"

She thought about it for a long time.

"I wonder if there would be anything to take over. I mean, why should it care? How could we figure what its concerns would be? Would it want to be worshipped, for instance? I doubt it. Would it want to 'rationalize all human behavior, to eliminate all emotion,' as I'm sure some sci-fi film computer must have told some damsel in distress in the 'fifties.

"You can use a word like awareness, but what does it mean? An amoeba must be aware. Plants probably are. There may be a level of awareness in a neuron. Even in an integrated circuit chip. We don't even know what our own awareness really is. We've never been able to shine a light on it, dissect it, figure out where it comes from or where it goes when we're dead. To apply human values to a thing like this hypothetical computer-net consciousness would be pretty stupid. But I don't see how it could interact with human awareness at all. It might not even notice us, any more than we notice cells in our bodies, or neutrinos passing through us, or the vibrations of the atoms in the air around us."

So she had to explain what a neutrino was. One thing I always provided her with was an ignorant audience. And after that, I pretty much forgot about our mythical hyper-computer.

"What about your Captain?" I asked, much later.

"Do you really want to know, Yank?" she mumbled, sleepily.

"I'm not afraid to know."

She sat up and reached for her cigarettes. I had come to know she sometimes smoked them in times of stress. She had told me she smoked after making love, but that first time had been the only time. The lighter flared in the dark. I heard her exhale.

"My Major, actually. He got a promotion. Do you want to know his name?"

"Lisa, I don't want to know any of it if you don't want to tell it. But if you do, what I want to know is did he stand by you."

"He didn't marry me, if that's what you mean. When he knew he had to go, he said he would, but I talked him out of it. Maybe it was the most noble thing I ever did. Maybe it was the most stupid."

"It's no accident I look Japanese. My grandmother was raped in '42 by a Jap soldier of the occupation. She was Chinese, living in Hanoi. My mother was born there. They went south after Dien Bien Phu. My grandmother died. My mother had it hard. Being Chinese was tough enough, but being half Chinese and half Japanese was worse. My father was half French and half Annamese. Another bad combination. I never knew him. But I'm sort of a capsule history of Vietnam."

The end of her cigarette glowed brighter once more.

"I've got one grandfather's face and the other grandfather's height. With tits by Goodyear. About all I missed was some American genes, but I was working on that for my children."

"When Saigon was falling I tried to get to the American Embassy. Didn't make it. You know the rest, until I got to Thailand, and when I finally got Americans to notice me, it turned out my Major was still looking for me. He sponsored me over here, and I made it in time to watch him die of cancer. Two months I had with him, all of it in the hospital."

"My god." I had a horrible thought. "That wasn't the war, too, was it? I mean, the story of your life—"

"—is the rape of Asia. No, Victor. Not that war, anyway. But he was one of those guys who got to see atom bombs up close, out in Nevada. He was too Regular Army to complain about it, but I think he knew that's what killed him."

"Did you love him?"

"What do you want me to say? He got me out of hell."

Again the cigarette flared, and I saw her stub it out.

"No," she said. "I didn't love him. He knew that. I've never loved anybody. He was very dear, very special to me. I would have

done almost anything for him. He was fatherly to me." I felt her looking at me in the dark. "Aren't you going to ask how old he was?"

"Fiftyish," I said.

"On the nose. Can I ask you something?"

"I guess it's your turn."

"How many girls have you had since you got back from Korea?"

I held up my hand and pretended to count on my fingers.

"One," I said, at last.

"How many before you went?"

"One. We broke up before I left for the war."

"How many in Korea?"

"Nine. All at Madame Park's jolly little whorehouse in Pusan."

"So you've made love to one white and ten Asians. I bet none of the others were as tall as me."

"Korean girls have fatter cheeks, too. But they all had your eyes."

She nuzzled against my chest, took a deep breath, and sighed.

"We're a hell of a pair, aren't we?"

I hugged her, and her breath came again, hot on my chest. I wondered how I'd lived so long without such a simple miracle as that.

"Yes. I think we really are."

Osborne came by again about a week later. He seemed subdued. He listened to the things Lisa had decided to give him without much interest. He took the printout she handed him, and promised to turn it over to the departments that handled those things. But he didn't get up to leave.

"I thought I ought to tell you, Apfel," he said, at last. "The Gavin case has been closed."

I had to think a moment to remember Kluge's real name had been Gavin.

"The coroner ruled suicide a long time ago. I was able to keep the case open quite a while on the strength of my suspicions." He nodded toward Lisa. "And on what she said about the suicide note. But there was just no evidence at all."

"It probably happened quickly," Lisa said. "Somebody caught him, tracked him back—it can be done; Kluge was lucky for a long time—and did him the same day."

"You don't think it was suicide?" I asked Osborne.

"No. But whoever did it is home free unless something new turns up."

"I'll tell you if it does," Lisa said.

"That's something else," Osborne said. "I can't authorize you to work over there any more. The county's taken possession of house and contents."

"Don't worry about it," Lisa said, softly.

There was a short silence as she leaned over to shake a cigarette from the pack on the coffee table. She lit it, exhaled, and leaned back beside me, giving Osborne her most inscrutable look. He sighed.

"I'd hate to play poker with you, lady," he said. "What do you mean, 'Don't worry about it?'"

"I bought the house four days ago. And its contents. If anything turns up that would help you re-open the murder investigation, I will let you know."

Osborne was too defeated to get angry. He studied her quietly for a while.

"I'd like to know how you swung that."

"I did nothing illegal. You're free to check it out. I paid good cash money for it. The house came onto the market. I got a good price at the Sheriff's sale."

"How'd you like it if I put my best men on the transaction? See if they can dig up some funny money? Maybe fraud. How about I get the F.B.I. in to look it all over?"

She gave him a cool look.

"You're welcome to. Frankly, Detective Osborne, I could have stolen that house, Griffith Park, and the Harbor Freeway and I don't think you could have caught me."

"So where does that leave me?"

"Just where you were. With a closed case, and a promise from me."

"I don't like you having all that stuff, if it can do the things you say it can do."

"I didn't expect you would. But that's not your department, is it? The county owned it for a while, through simple confiscation. They didn't know what they had, and they let it go."

"Maybe I can get the Fraud detail out here to confiscate your software. There's criminal evidence on it."

"You could try that," she agreed.

They stared at each other for a while. Lisa won. Osborne rubbed his eyes and nodded. Then he heaved himself to his feet and slumped to the door.

Lisa stubbed out her cigarette. We listened to him going down the walk.

"I'm surprised he gave up so easy," I said. "Or did he? Do you think he'll try a raid?"

"It's not likely. He knows the score."

"Maybe you could tell it to me."

"For one thing, it's not his department, and he knows it."

"Why did you buy the house?"

"You ought to ask *how*."

I looked at her closely. There was a gleam of amusement behind the poker face.

"Lisa. What did you do?"

"That's what Osborne asked himself. He got the right answer, because he understands Kluge's machines. And he knows how things get done. It was no accident that house going on the market, and no accident I was the only bidder. I used one of Kluge's pet councilmen."

"You bribed him?"

She laughed, and kissed me.

"I think I finally managed to shock you, Yank. That's gotta be the biggest difference between me and a native-born American. Average citizens don't spend much on bribes over here. In Saigon, everybody bribes."

"Did you bribe him?"

"Nothing so indelicate. One has to go in the back door over here. Several entirely legal campaign contributions appeared in the accounts of a State Senator, who mentioned a certain situation to someone, who happened to be in the position to do legally what I happened to want done." She looked at me askance. "Of *course* I bribed him, Victor. You'd be amazed to know how cheaply. Does that bother you?"

"Yes," I admitted. "I don't like bribery."

"I'm indifferent to it. It happens, like gravity. It may not be admirable, but it gets things done."

"I assume you covered yourself."

"Reasonably well. You're never entirely covered with a bribe, because of the human element. The councilman might geek if they got him in front of a grand jury. But they won't, because Osborne won't pursue it. That's the second reason he walked out of here without a fight. *He* knows how the world wobbles, he knows what kind of force I now possess, and he knows he can't fight it."

There was a long silence after that. I had a lot to think about, and I didn't feel good about most of it. At one point Lisa reached

for the pack of cigarettes, then changed her mind. She waited for me to work it out.

"It is a terrific force, isn't it," I finally said.

"It's frightening," she agreed. "Don't think it doesn't scare me. Don't think I haven't had fantasies of being superwoman. Power is an awful temptation, and it's not easy to reject. There's so much I could do."

"Will you?"

"I'm not talking about stealing things, or getting rich."

"I didn't think you were."

"This is political power. But I don't know how to wield it . . . it sounds corny, but to use it for good. I've seen so much evil come from good intentions. I don't think I'm wise enough to do any good. And the chances of getting torn up like Kluge did are large. But I'm not wise enough to walk away from it. I'm still a street urchin from Saigon, Yank. I'm smart enough not to use it unless I have to. But I can't give it away, and I can't destroy it. Is that stupid?"

I didn't have a good answer for that one. But I had a bad feeling.

My doubts had another week to work on me. I didn't come to any great moral conclusions. Lisa knew of some crimes, and she wasn't reporting them to the authorities. That didn't bother me much. She had at her fingertips the means to commit more crimes, and that bothered me a lot. Yet I really didn't think she planned to do anything. She was smart enough to use the things she had only in a defensive way—but with Lisa that could cover a lot of ground.

When she didn't show up for dinner one evening, I went over to Kluge's and found her busy in the living room. A nine-foot section of shelving had been cleared. The discs and tapes were stacked on a table. She had a big plastic garbage can and a magnet the size of a softball. I watched her wave a tape near the magnet, then toss it in the garbage can, which was almost full. She glanced up, did the same operation with a handful of discs, then took off her glasses and wiped her eyes.

"Feel any better now, Victor?" she asked.

"What do you mean? I feel fine."

"No you don't. And I haven't felt right, either. It hurts me to do it, but I have to. You want to go get the other trash can?"

I did, and helped her pull more software from the shelves.

"You're not going to wipe it all, are you?"

"No. I'm wiping records, and . . . something else."

"Are you going to tell me what?"

"There are things it's better not to know," she said, darkly.

I finally managed to convince her to talk over dinner. She had said little, just eating and shaking her head. But she gave in.

"Rather dreary, actually," she said. "I've been probing around some delicate places the last couple days. These are places Kluge visited at will, but they scare the hell out of me. Dirty places. Places where they know things I thought I'd like to find out."

She shivered, and seemed reluctant to go on.

"Are you talking about military computers? The CIA?"

"The CIA is where it starts. It's the easiest. I've looked around at NORAD—that's the guys who get to fight the next war. It makes me shiver to see how easy Kluge got in there. He cobbled up a way to start World War Three, just as an exercise. That's one of the things we just erased. The last two days I was nibbling around the edges of the big boys. The Defense Intelligence Agency and the National Security . . . something. DIA and NSA. Each of them is bigger than the CIA. Something knew I was there. Some watchdog program. As soon as I realized that I got out quick, and I've spent the last five hours being sure it didn't follow me. And now I'm sure, and I've destroyed all that, too."

"You think they're the ones who killed Kluge?"

"They're surely the best candidates. He had tons of their stuff. I know he helped design the biggest installations at NSA, and he'd been poking around in there for years. One false step is all it would take."

"Did you get it all? I mean, are you sure?"

"I'm sure they didn't track me. I'm not sure I've destroyed all the records. I'm going back now to take a last look."

"I'll go with you."

We worked until well after midnight. Lisa would review a tape or a disc, and if she was in any doubt, toss it to me for the magnetic treatment. At one point, simply because she was unsure, she took the magnet and passed it in front of an entire shelf of software.

It was amazing to think about it. With that one wipe she had randomized billions of bits of information. Some of it might not exist anywhere else in the world. I found myself confronted by even harder questions. Did she have the right to do it? Didn't knowledge exist for everyone? But I confess I had little trouble quelling my protests. Mostly I was happy to see it go. The old

reactionary in me found it easier to believe There Are Things We Are Not Meant To Know.

We were almost through when her monitor screen began to malfunction. It actually gave off a few hisses and pops, so Lisa stood back from it for a moment, then the screen started to flicker. I stared at it for a while. It seemed to me there was an image trying to form in the screen. Something three-dimensional. Just as I was starting to get a picture of it I happened to glance at Lisa, and she was looking at me. Her face was flickering. She came to me and put her hands over my eyes.

"Victor, you shouldn't look at that."

"It's okay," I told her. And when I said it, it was, but as soon as I had the words out I knew it wasn't. And that is the last thing I remembered for a long time.

I'm told it was a very bad two weeks. I remember very little of it. I was kept under high dosage of drugs, and my few lucid periods were always followed by a fresh seizure.

The first thing I recall clearly was looking up at Doctor Stuart's face. I was in a hospital bed. I later learned it was in Cedars-Sinai, not the Veteran's Hospital. Lisa had paid for a private room.

Stuart put me through the usual questions. I was able to answer them, though I was very tired. When he was satisfied as to my condition he finally began to answer some of my questions. I learned how long I had been there, and how it had happened.

"You went into consecutive seizures," he confirmed. "I don't know why, frankly. You haven't been prone to them for a decade. I was thinking you were well under control. But nothing is ever really stable, I guess."

"So Lisa got me here in time."

"She did more than that. She didn't want to level with me at first. It seems that after the first seizure she witnessed she read everything she could find. From that day, she had a syringe and a solution of Valium handy. When she saw you couldn't breathe she injected you with 100 milligrams, and there's no doubt it saved your life."

Stuart and I had known each other a long time. He knew I had no prescription for Valium, though we had talked about it the last time I was hospitalized. Since I lived alone, there would be no one to inject me if I got in trouble.

He was more interested in results than anything else, and what Lisa did had the desired result. I was still alive.



He wouldn't let me have any visitors that day. I protested, but soon was asleep. The next day she came. She wore a new T-shirt. This one had a picture of a robot wearing a gown and mortarboard, and said "Class of 11111000000." It turns out that was 1984 in binary notation.

She had a big smile and said "Hi, Yank!" and as she sat on the bed I started to shake. She looked alarmed and asked if she should call the doctor.

"It's not that," I managed to say. "I'd like it if you just held me."

She took off her shoes and got under the covers with me. She held me tightly. At some point a nurse came in and tried to shoo her out. Lisa gave her profanities in Vietnamese, Chinese, and a few startling ones in English, and the nurse left. I saw Doctor Stuart glance in later.

I felt much better when I finally stopped crying. Lisa's eyes were wet, too.

"I've been here every day," she said. "You look awful, Victor."

"I feel a lot better."

"Well, you look better than you did. But your doctor says you'd better stick around another couple of days, just to make sure."

"I think he's right."

"I'm planning a big dinner for when you get back. You think we should invite the neighbors?"

I didn't say anything for a while. There were so many things we hadn't faced. Just how long could it go on between us? How long before I got sour about being so useless? How long before she got tired of being with an old man? I don't know just when I had started to think of Lisa as a permanent part of my life. And I wondered how I could have thought that.

"Do you want to spend more years waiting in hospitals for a man to die?"

"What do you want, Victor? I'll marry you if you want me to. Or I'll live with you in sin. I prefer sin, myself, but if it'll make you happy—"

"I don't know why you want to saddle yourself with an epileptic old fart."

"Because I love you."

It was the first time she had said it. I could have gone on questioning—bringing up her Major again, for instance—but I had no urge to. I'm very glad I didn't. So I changed the subject.

"Did you get the job finished?"

She knew which job I was talking about. She lowered her voice and put her mouth close to my ear.

"Let's don't be specific about it here, Victor. I don't trust any place I haven't swept for bugs. But, to put your mind at ease, I did finish, and it's been a quiet couple of weeks. No one is any wiser, and I'll never meddle in things like that again."

I felt a lot better. I was also exhausted. I tried to conceal my yawns, but she sensed it was time to go. She gave me one more kiss, promising many more to come, and left me.

It was the last time I ever saw her.

At about ten o'clock that evening Lisa went into Kluge's kitchen with a screwdriver and some other tools and got to work on the microwave oven.

The manufacturers of those appliances are very careful to insure they can't be turned on with the door open, as they emit lethal radiation. But with simple tools and a good brain it is possible to circumvent the safety interlocks. Lisa had no trouble with them. About ten minutes after she entered the kitchen she put her head in the oven and turned it on.

It is impossible to say how long she held her head in there. It was long enough to turn her eyeballs to the consistency of boiled eggs. At some point she lost voluntary muscle control and fell to the floor, pulling the microwave down with her. It shorted out, and a fire started.

The fire set off the sophisticated burglar alarm she had installed a month before. Betty Lanier saw the flames and called the fire department as Hal ran across the street and into the burning kitchen. He dragged what was left of Lisa out onto the grass. When he saw what the fire had done to her upper body, and in particular her breasts, he threw up.

She was rushed to the hospital. The doctors there amputated one arm and cut away the frightful masses of vulcanized silicone, pulled all her teeth, and didn't know what to do about the eyes. They put her on a respirator.

It was an orderly who first noticed the blackened and bloody T-shirt they had cut from her. Some of the message was unreadable, but it began, "I can't go on this way anymore . . ."

There is no other way I could have told all that. I discovered it piecemeal, starting with the disturbed look on Doctor Stuart's face when Lisa didn't show up the next day. He wouldn't tell me anything, and I had another seizure shortly after.

The next week is a blur. I remember being released from the hospital, but I don't remember the trip home. Betty was very good to me. They gave me a tranquilizer called Tranxene, and it was even better. I ate them like candy. I wandered in a drugged haze, eating only when Betty insisted, sleeping sitting up in my chair, coming awake not knowing where or who I was. I returned to the prison camp many times. Once I recall helping Lisa stack severed heads.

When I saw myself in the mirror, there was a vague smile on my face. It was Tranxene, caressing my frontal lobes. I knew that if I was to live much longer, me and Tranxene would have to become very good friends.

I eventually became capable of something that passed for rational thought. I was helped along somewhat by a visit from Osborne. I was trying, at that time, to find reasons to live, and wondered if he had any.

"I'm very sorry," he started off. I said nothing. "This is on my own time," he went on. "The department doesn't know I'm here."

"Was it suicide?" I asked him.

"I brought along a copy of the . . . the note. She ordered it from a shirt company in Westwood, three days before the . . . accident."

He handed it to me, and I read it. I was mentioned, though not by name. I was "the man I love." She said she couldn't cope with my problems. It was a short note. You can't get too much on a T-shirt. I read it through five times, then handed it back to him.

"She told you Kluge didn't write his note. I tell you she didn't write this."

He nodded reluctantly. I felt a vast calm, with a howling nightmare just below it. Praise Tranxene.

"Can you back that up?"

"She saw me in the hospital shortly before she died. She was full of life and hope. You say she ordered the shirt three days before. I would have felt that. And that note is pathetic. Lisa was never pathetic."

He nodded again.

"Some things I want to tell you. There were no signs of a struggle. Mrs. Lanier is sure no one came in the front. The crime lab went over the whole place and we're sure no one was in there with her. I'd stake my life on the fact that no one entered or left that house. Now, I don't believe it was suicide, either, but do you have any suggestions?"

"The NSA," I said.

I explained about the last things she had done while I was still there. I told him of her fear of the government spy agencies. That was all I had.

"Well, I guess they're the ones who could do a thing like that, if anyone could. But I'll tell you, I have a hard time swallowing it. I don't know why, for one thing. Maybe you believe those people kill like you and I'd swat a fly." His look made it into a question.

"I don't know what I believe."

"I'm not saying they wouldn't kill for national security, or some such shit. But they'd have taken the computers, too. They wouldn't have left her alone, they wouldn't even have let her *near* that stuff after they killed Kluge."

"What you're saying makes sense."

He muttered on about it for quite some time. Eventually I offered him some wine. He accepted thankfully. I considered joining him—it would be a quick way to die—but did not. He drank the whole bottle, and was comfortably drunk when he suggested we go next door and look it over one more time. I was planning on visiting Lisa the next day, and knew I had to start somewhere building myself up for that, so I agreed to go with him.

We inspected the kitchen. The fire had blackened the counters and melted some linoleum, but not much else. Water had made a mess of the place. There was a brown stain on the floor which I was able to look at with no emotion.

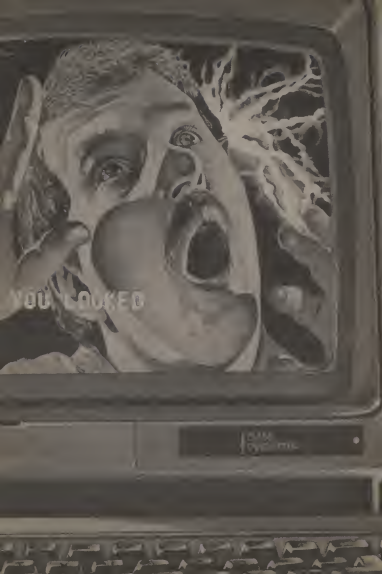
So we went back to the living room, and one of the computers was turned on. There was a short message on the screen.

IF YOU WISH TO KNOW MORE  
PRESS ENTER■

"Don't do it," I told him. But he did. He stood, blinking solemnly, as the words wiped themselves out and a new message appeared.

YOU LOOKED

The screen started to flicker and I was in my car, in darkness, with a pill in my mouth and another in my hand. I spit out the pill, and sat for a moment, listening to the old engine ticking over. In my other hand was the plastic pill bottle. I felt very tired, but opened the car door and shut off the engine. I felt my way to the garage door and opened it. The air outside was fresh and sweet. I looked down at the pill bottle and hurried into the bathroom.



YOU LOOKED

IBM  
SYSTEMS

When I got through what had to be done there were a dozen pills floating in the toilet that hadn't even dissolved. There were the wasted shells of many more, and a lot of other stuff I won't bother to describe. I counted the pills in the bottle, remembered how many there had been, and wondered if I would make it.

I went over to Kluge's house and could not find Osborne. I was getting tired, but I made it back to my house and stretched out on the couch to see if I would live or die.

The next day I found the story in the paper. Osborne had gone home and blown out the back of his head with his revolver. It was not a big story. It happens to cops all the time. He didn't leave a note.

I got on the bus and rode out to the hospital and spent three hours trying to get in to see Lisa. I wasn't able to do it. I was not a relative and the doctors were quite firm about her having no visitors. When I got angry they were as gentle as possible. It was then I learned the extent of her injuries. Hal had kept the worst from me. None of it would have mattered, but the doctors swore there was nothing left in her head. So I went home.

She died two days later.

She had left a will, to my surprise. I got the house and contents. I picked up the phone as soon as I learned of it, and called a garbage company. While they were on the way I went for the last time into Kluge's house.

The same computer was still on, and it gave the same message.

PRESS ENTER■

I cautiously located the power switch, and turned it off. I had the garbage people strip the place to the bare walls.

I went over my own house very carefully, looking for anything that was even the first cousin to a computer. I threw out the radio. I sold the car, and the refrigerator, and the stove, and the blender, and the electric clock. I drained the waterbed and threw out the heater.

Then I bought the best propane stove on the market, and hunted a long time before I found an old icebox. I had the garage stacked to the ceiling with firewood. I had the chimney cleaned. It would be getting cold soon.

One day I took the bus to Pasadena and established the Lisa Foo Memorial Scholarship fund for Vietnamese refugees and their

children. I endowed it with seven hundred thousand eighty-three dollars and four cents. I told them it could be used for any field of study except computer science. I could tell they thought me eccentric.

And I really thought I was safe, until the phone rang.

I thought it over for a long time before answering it. In the end, I knew it would just keep on going until I did. So I picked it up.

For a few seconds there was a dial tone, but I was not fooled. I kept holding it to my ear, and finally the tone turned off. There was just silence. I listened intently. I heard some of those far-off musical tones that live in phone wires. Echoes of conversations taking place a thousand miles away. And something infinitely more distant and cool.

I do not know what they have incubated out there at the NSA. I don't know if they did it on purpose, or if it just happened, or if it even has anything to do with them, in the end. But I know it's out there, because I heard its soul breathing on the wires. I spoke very carefully.

"I do not wish to know any more," I said. "I won't tell anyone anything. Kluge, Lisa, and Osborne all committed suicide. I am just a lonely man, and I won't cause you any trouble."

There was a click, and a dial tone.

Getting the phone taken out was easy. Getting them to remove all the wires was a little harder, since once a place is wired they expect it to be wired forever. They grumbled, but when I started pulling them out myself, they relented, though they warned me it was going to cost.

PG&E was harder. They actually seemed to believe there was a regulation requiring each house to be hooked up to the grid. They were willing to shut off my power—though hardly pleased about it—but they just weren't going to take the wires away from my house. I went up on the roof with an axe and demolished four feet of eaves as they gaped at me. Then they coiled up their wires and went home.

I threw out all my lamps, all things electrical. With hammer, chisel, and handsaw I went to work on the drywall just above the baseboards.

As I stripped the house of wiring I wondered many times why I was doing it. Why was it worth it? I couldn't have very many more years before a final seizure finished me off. Those years were not going to be a lot of fun.

Lisa had been a survivor. She would have known why I was doing this. She had once said I was a survivor, too. I survived the camp. I survived the death of my mother and father and managed to fashion a solitary life. Lisa survived the death of just about everything. No survivor expects to live through it all. But while she was alive, she would have worked to stay alive.

And that's what I did. I got all the wires out of the walls, went over the house with a magnet to see if I had missed any metal, then spent a week cleaning up, fixing the holes I had knocked in the walls, ceiling, and attic. I was amused trying to picture the real-estate agent selling this place after I was gone.

It's a great little house, folks. No electricity . . .

Now I live quietly, as before.

I work in my garden during most of the daylight hours. I've expanded it considerably, and even have things growing in the front yard now.

I live by candlelight, and kerosene lamp. I grow most of what I eat.

It took a long time to taper off the Tranxene and the Dilantin, but I did it, and now take the seizures as they come. I've usually got bruises to show for it.

In the middle of a vast city I have cut myself off. I am not part of the network growing faster than I can conceive. I don't even know if it's dangerous, to ordinary people. It noticed me, and Kluge, and Osborne. And Lisa. It brushed against our minds like I would brush away a mosquito, never noticing I had crushed it. Only I survived.

But I wonder.

It would be very hard . . .

Lisa told me how it can get in through the wiring. There's something called a carrier wave that can move over wires carrying household current. That's why the electricity had to go.

I need water for my garden. There's just not enough rain here in southern California, and I don't know how else I could get the water.

Do you think it could come through the pipes? ●





# ON BOOKS

by Baird Searles

## Golden Witchbreed

By Mary Gentle

Morrow, \$16.95

A major new work from what would look to be a major new talent, that's *Golden Witchbreed* by Englishwoman Mary Gentle. (You can say Englishwoman these days, can't you? Or should that be Englishperson?) It's one of those ultrasatisfying lo-o-o-ong novels, packed with detail and based in an alien culture that after a time the reader starts to live in.

Empath and diplomat Lynne de Lisle Christie is the first envoy from a fast-expanding Earth to Orthe, and is one of the first humans there, though a xenobiology team is already on the planet. Orthe is considered pretechnological (no powered vehicles, no long distance communication); the natives are humanoid with radical differences from humans and there is a strong social structure, dominated by the semi-independent provinces of "The Southland," a continent confusingly north of the other inhabited land mass.

The study team has been confined to the Southland's major

city by the powers-that-be of Orthe, but Christie, due to her status as envoy, is free to travel. The more sophisticated Ortheans have been surprisingly receptive to the idea of contact with beings from another world—much more so than Western human pretech cultures would have seen. (Renaissance Europe, for instance, would have overwhelmingly decided them to be demons.) Nevertheless, there is a strong element in the Southland that considers the offworlders to be the Golden Witchbreed come again, legendary rulers of the planet of millennia ago who are remembered with dread.

On a visit to a provincial capital, she is imprisoned as Witchbreed, escapes with sympathetic aid, and makes her way through the wilder sections of Orthe with various companions. She has barely returned from this scrape to the royal Court of the Southland (which is more or less on her side) when a T'An (a provincial ruler) is murdered there. Christie is blamed through circumstantial evidence, and again a fugitive, goes to the southern

continent to find the mysterious Hexenmeister of the Brown Tower, who may have proof of her innocence.

As you can see, Christie (and the reader) see a lot of Orthe. There is action, intrigue, and, surprisingly, a full-scale murder mystery, as the clues are put together as to who *really* killed the T<sup>ra</sup>n and is behind what is obviously a plot to do away with Christie and discredit the idea of contact with humanity.

All of this set into a stunningly complex society which the reader gets to know as Christie does. The theme of the first human opening up an unknown culture is hardly new—Le Guin's *The Left Hand of Darkness* and the great progenitor to which Le Guin gives credit, Wright's *Islandia*, come to mind immediately. What makes those two so special is the involvement the reader feels for the society thus revealed; creating such a society requires a very special sort of talent. Gentle has it.

What quibbles are to be quibbled are because overall the book is so well done that the lapses are probably the more glaring. It takes a while to get into Orthe; that is partially because such a meticulously built creation needs a slow introduction, but also, though Christie keeps insisting on how alien the Ortheans really are, the

evidence is scant. One might well be in the humanly exotic milieu of *The Far Pavilions* or *Shogun* rather than anything particularly science fictional. But the revelations and surprises come eventually (the jacket copy of the English edition gives one away in the first sentence, alas; I mention it in case the American does the same, in which case don't say you weren't warned.)

Something that seems necessary to this sort of thing, also, is the establishment of a viable alien nomenclature and vocabulary. This Gentle has done very well, to the extent that I was not translating or interpreting the foreign terms by the end of the novel, but accepting them at their Orthean values, a sure sign of success. Here again a quibble—most of the words are so right yet *so* alien that the several that have links to known languages tend to stand out unnervingly (the above-mentioned hexenmeister, for instance).

This is an amazing work for an author yet in her 20s. Move over, Le Guin, C.J. Cherryh, and Tanith Lee; there's a new-comer well on the way.

### **Dark Valley Destiny**

By L. Sprague de Camp,  
Catherine Crook de Camp, &  
Jane Whittington Griffin  
Bluejay Books, \$16.95

Strong men may turn pale at

the thought, but it's highly likely that, along with Tolkien, the most influential figure in fantasy writing of this century will be considered to be Robert E. Howard. In him, the traditions of the historical, occult adventure of Haggard met the idea of created, mythical worlds of Morris and Dunsany and the results were overlaid with a raw, free-wheeling American imagination that resulted in something new. It took a quarter century to catch on, well beyond Howard's lifespan, but it has become an indelible contribution to the genre.

A decade ago, L. Sprague de Camp wrote a biography of H.P. Lovecraft, one of the other "Three Musketeers of Weird Tales" (the third was Clark Ashton Smith). It was notable for its research, and flawed by an unstated but evident lack of sympathy for HPL. Now de Camp has taken a more congenial subject in Howard, as might be expected; his fiction buckles swashes as well as Howard's (with a good deal more sophistication) and he has completed or put into publishable form more than a few of the Conan stories. His biography of Howard is portentously called *Dark Valley Destiny*, co-authored with his wife, Catherine Crook de Camp, and Jane Whittington Griffin. (What a lot of names they all have.)

The sympathy is there, and

the impeccable research; the problem with telling the tale of the (short) life of Robert E. Howard is that absolutely nothing of interest happened in it until its end, when, at the age of 30, he killed himself with a gunshot through the head.

He was born the son of a small-town Texas doctor, was raised in various tiny communities in that state, was fiercely dominated by mother and father (who were at odds with each other), sold stories to the cheap fiction magazines of the time by mail, barely traveled beyond the boundaries of his native Texas, and committed suicide as his mother lay dying.

The drama is all within, and perhaps beyond the reach of the straightforward biographer, whose first duty is to get down the facts and outline of the life. The authors certainly make psychological speculations, almost all of which seem valid enough (though some very obvious answers to Howard's questionable sexuality—or lack of it—are rather conspicuous by their absence). But the very limits of objective biography might well preclude being able to get at the heart of the matter of Howard's tragic, insular life.

It is the stuff of tragedy, an American tragedy that could only have happened in that time, that place. Fifty years earlier Howard would have lived and died anonymously, an im-

aginative maverick who could have made no mark on history. Fifty years later, advances in communication, transportation, and the everyday knowledge and application of psychology could almost surely have freed him from the terrible narrow trap that was his life.

*Dark Valley Destiny* gives the reader the basis to see this, but the authors almost seem to avoid pointing out the ironic dichotomy of the poverty of the life and the riches of the imagination it gave rise to. For the Howard fan, there is the interest of learning from what materials Howard cobbled Conan, Kull, and the other heroes; the input was a potpourri that went from Jack London's *Star Rover* through Texas tall tales to the exotic fare of silent and early sound films. But the story of this puritanical, paranoid, and pathetic man is a grim and depressing one.

There is a final chapter that chronicles the rise in popularity of Howard's writing after his death; it's a good deal livelier than anything that precedes it, what with law suits, lost manuscripts, and the sweet smell of success. It is reading this that the full tragedy comes home.

Perhaps the single most interesting fact to be gathered from this biography is that de Camp, in conversation with Tolkien, was told that he (Tol-

kien) "rather liked" the Conan stories. One wonders what "Two-Gun Bob" (as Lovecraft called him) would have thought of *The Lord of the Rings*.

### **The Colour of Magic**

By Terry Pratchett

St. Martin's, \$11.95

"A laugh riot, with everything from the subtlest word plays to sheer Laurel and Hardy slapstick"—there aren't too many works of fantasy or SF that can be described that way. Very few, in fact. Come to think of it—none. There are a few SF novels that have great moments of humor (Lee's *Don't Bite the Sun*. Panshin's *Thurb* novels, Sladek's *Roderick*). There are even fewer funny fantasies; Leiber's Gray Mouser stories come to mind, but they have wit more than humor, and de Camp and Pratt's Harold Shea stories always bring a smile.

But there are no fantasies that are as consistently, inventively mad as Terry Pratchett's new *The Colour of Magic*, which is indeed, a laugh riot, etc. Now humor is both both terribly individual (one man's yuck = another man's yawn), and very hard to communicate. The temptation is simply to quote paragraph after paragraph (akin to that awful impulse of reading the good bits of a funny book aloud to whoever is unfortunate enough to be around

while you're reading it), but I'll try and keep it minimal.

*The Colour of Magic* takes place "in a distant and second-hand set of dimensions, in an astral plane that was never meant to fly . . ." Through the void of this universe swims the great turtle A'Tuin, on whose shell stand four elephants who bear the disc of the world in which the story takes place. Later in the novel, the disc world mounts its first space expedition for religious reasons, i.e. to discover the sex of A'Tuin, which could be terribly important (especially if another cosmic turtle is encountered). The geography of the disc is pretty complicated: there are two major directions, of course, Hubward and Rimward; but since the disc revolves, there are also two minor directions—Turnwise and Widdershins.

Mostly the story concerns the adventures of one Rincewind whose occupation is about the only thing close to cliché in the book—he is an inept wizard. But the cause and means of his ineptness are as unexpected as everything else here, and he keeps dreaming of a universe where law is natural, nature is lawful, and effect follows cause. He is the self-appointed guide to Twoflower, the first tourist to make it across the disc from the Counterweight Continent on the other side, who has come to see the legendary heros, bar-

barians, tavern brawls and general romantic goings-on of Rincewind's neck of the woods. After succeeding in burning down Rincewind's city almost entirely, the two go adventuring, accompanied part of the way, to Twoflower's joy, by the hero Hrun the Barbarian, "who was practically an academic by Hub standards in that he could think without moving his lips."

Their adventures are wild and wonderful, and despite the temptation to quote the whole book, I will cite only a couple of the dizzier ingredients. One is Twoflower's marvelous "iconoscope" which, when pointed at an object and a lever pressed, delivers a picture of the object from its bowels in a matter of seconds. This is accomplished, it seems, by a small and impolite demon who lives inside and is a master of speedy oil painting. And then there's Kring, Hrun's magic sword, which talks; it talks so much, in fact, that it's a hopeless bore. Kring's secret ambition is to be a plowshare, though it's not really sure what that is.

There's the terrible Gorrunna Trench in the discworld's ocean, with such an evil reputation that even the krakens go there in pairs. And . . . no, this must stop. Pratchett delivers all this unbounded silliness with a relatively straight face, revealing (if we must analyze) the vast humorous potential of a

place where reality is mutable and anything is possible one way or another. There is no end to the wacky wonders of *The Colour of Magic*; I laughed an awful lot. This is not just the funniest fantasy I've ever come across; it's one of the funniest books.

### **Hoka!**

By Poul Anderson

and Gordon R. Dickson

Wallaby Books, \$8.95 (paper)

What *are* hokas? Hokas are inhabitants of the planet Toka; they are so cute that they make Ewoks and Fuzzies look like the less attractive species of dinosaurs. They are absolutely friendly and quite intelligent, but very easily influenced. So easily influenced that any piece of human literature that catches their fancy immediately results in the society being remolded; this, as you can see, can lead to all sorts of chaos, especially for human representatives desperately trying to get the Hokas to do their own thing.

The tales of the Hoka variations on human fiction were first told in *Earthman's Burden* (with the unforgettably perfect illustrations of Edd Cartier). Now the remaining Hoka stories are collected in *Hoka!* by Poul Anderson and Gordon R. Dickson, and the chaos continues unabated. Here is what happens when the demonically imaginative teddy bears get

hold of "Casey At the Bat," *The Jungle Books*, Eric Ambler, and the Horatio Hornblower novels.

Adults will appreciate the Hoka mayhem perpetrated on various beloved books; young people will simply be charmed by the nuttiness of it all. The illustrations by various hands in this edition don't exactly dim the memory of Cartier's Hokas, so find the first book (it's still in print) to see what they really look like.

### **A Mirror For Observers**

By Edgar Pangborn

Bluejay Books, \$5.95 (paper)

Edgar Pangborn's works are mostly unfamiliar to today's readers, which is a shame in a way. He was a strong voice in that humanistic wave which swept SF in the 1950s, whose major mentor was Sturgeon and the enduring classic of which is Miller's *A Canticle For Leibowitz*. Characteristic qualities were quirky, lovable people (and aliens) and an abiding respect for human nature, a sort of Ann Frankishness that doesn't sit too well in these cynical '80s.

Pangborn's *A Mirror For Observers* has just been reprinted after a long period of obscurity, and it holds up middling well. It is told in the first person by a Martian "observer," one of a colony of emigrés that fled dying Mars to live among us in hiding. Beneficently so, it should be noted, and the Martians *are*

observers, meddling in human affairs only *in extremis*.

However, there is a dissident group, who *do* meddle with malice aforethought, and the novel is about the battle between the narrator and one of the dissidents for the mind and conscience of an Italian American boy who lives in Massachusetts, whom the Martians think to be vastly important to the moral growth of the human race. The three meet first when Angelo is still almost a child; their paths cross again when he is a young adult, and about to be involved in a neo-Fascist party which is coming close to dominating America. The climax comes when a deadly mutated virus which the Neo-Fascists have developed is accidentally unleashed.

*A Mirror For Observers* has dated in odd ways. The viewpoint, as noted, seems a bit sticky (which might just be a sad comment on our time), and, because Pangborn has set the story in the near future of the time of its publication (1954), the events of the 1960s and 1970s are perforce unrealistic. For instance, there is a heart-breakingly optimistic view of a "futuristic," redeveloped New York. This can be got around, of course, by viewing it as a sort of alternate history, and simply going with the story which is, indeed, a pretty good one.

In short, it's an amiable novel

of some historical interest, that I would be glad to see available again as an ordinary paperback. Its return to print, however, is marred by the curious decision of the publisher to release it as a "trade" (oversized) paperback. This is a disservice to the novel *and* the reader.

*Shoptalk* . . . The sequel to Brian Aldiss's sensational *Helliconia Spring* is out in hardcover. It's called (logically enough) *Helliconia Summer* (Atheneum, \$16.95); the first book is available in trade paperback (Berkley, \$6.95). One more to go in what will be one of the epic SF trilogies . . . Also available in paperback is Robin McKinley's highly original fantasy, *The Blue Sword* (Berkley, \$2.75), reviewed in this space a year ago . . . An early work of Patricia McKillip's is one of the premiere releases of the new "Magic Quest" line of paperbacks, devoted to "young adult" fantasies. That's a suspect term, but it's really a euphemism for juveniles whose appeal transcends their genre, of which there are many great examples. The McKillip is *The Throme of the Erril of Sherill* (Tempo, \$2.25).

Books to be considered for review in this column should be submitted to Baird Searles, % The Science Fiction Shop, 56 8th Ave., NY, NY 10014. ●

(Continued from page 20)

tems are published each year, this column will try to keep you abreast of the many new supplements, adventure modules, and play-aids that come out for existing games.

Tabletop (board and card games) were the second most popular types of games (exactly the same number—85.9%—have much or some interest in tabletop games as they do in role-playing games). Most releases of new games are of this type, so the column will continue its coverage in this area.

While many of you may play an occasional video game, very few want any space devoted to them in this column.

*Breadth or depth?* How would you like the column to be written?

	A	B	C
10. One game per column	56.5	30.6	12.9
11. Several games per column	25.2	48.4	25.8
12. How-to-play tips	52.9	30.6	16.5

The format of just one game per column was most favored, and with the amount of space available, it allows the most detail about a game. Occasionally, when appropriate, more than one game may be covered (74.2% said they had much or some interest in the multi-game format).

A big surprise was how many of you want to see how-to-play tips in the column. This will take some looking into to see what's most appropriate: overall strategy or specific tactics.

*Do you want survey reports?* During the year there are awards, conventions, etc., that could be covered.

	A	B	C
13. Award winners	47.1	25.8	27.1
14. New Releases	47.1	37.6	15.3
15. Game Conventions	32.9	34.1	33.0
16. Magazines & books on games	25.2	50.6	23.6

There was no overwhelming consensus on what surveys you prefer. Award winners and new releases have been written on most often in the column, and the majority of you seem to favor that approach.

There are those who rave about game conventions—and an equal number that have absolutely no interest in them. Since there are a number of you that might go to a con if it were close, I may devote one column per year to these conventions.

*Comments & suggestions.* Only four letters came in that said they hoped the column would be eliminated from the magazine. The rest of you were supportive and hoped that more space would be found to allow even more detail and perhaps photos of the games to be printed. Thanks to all who took the time to respond. Everything was read, accounted for, and appreciated. ●



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# SF CONVENTIONAL CALENDAR

by Erwin S. Strauss

Lots of con(vention)s in the next month, until the lull for college exams. Make plans now for social weekends with your favorite SF authors, editors, artists and fellow fans. For a longer, later list, an explanation of cons, and a sample of SF folksongs, send me an SASE (addressed, stamped #10 (long) envelope) at 9850 Fairfax Sq. #232, Fairfax VA 22031. (703) 273-6111 is the hot line. If a machine answers, leave your area code and number. I'll call back on my nickel. Send a #10 SASE when writing. For free listings, let me know about your con 6 months ahead. Look for me behind the big Filthy Pierre badge at cons.

## APRIL, 1984

13-15—**CapCon**. For info write: Box 2625, Lubbock TX 79408. Or phone (703) 273-6111 (10 am to 10 pm only, not collect). Con will be held in Lubbock TX (if city omitted, same as in address) at the Villa Inn. Guests will include Robert (Mythconceptions) Aspin, Andrew J. Offutt (John Cleve)

13-15—**CostumeCon**, Town & Country Hotel, San Diego CA. SF, fantasy & historical costumes.

20-21—**MunchCon**, % MU SF Soc., MSC, Marshall U., Huntington WV 25701. On campus. Free.

20-22—**Space Development Conference**, 1275 4th #242, Santa Rosa CA 95404. (707) 538-1227. At the Sheraton Palace, San Francisco CA. L-5 Society's 3rd annual big meet. Toastmaster: Jerry Pournelle

20-22—**MiniCon**, (612) 874-9118. Minneapolis MN. Somtow (Aquillad. Mallworld) Sucharitkul.

20-22—**BaltiCon**, Hyatt Regency Hotel, Inner Harbor, Baltimore MD. Parke Godwin, Robin Wood, Marta Randall, Alan E. Nourse, Marvin Kaye. C. L. Moore. Usually sells out its limit (2001).

20-23—**SeaCon**, 21 The Village St., Leeds LS4 2PR, UK. At the Metropole Hotel, Brighton, England. The annual British national con, this year combined with the European Continental SF Conventon.

27-29—**Kubla Kahn**, 647 Devon Dr., Nashville TN 37220. (615) 832-8402. V. DiFate, A. J. Offutt

27-29—**Contretemps**, Box 12422, Omaha NE 68112. P. McKillip, artist R. Musgrave, S. R. Donaldson.

27-29—**TreasureCon**, Box 22111, Billings MT 59104. (406) 252-4398 or 656-8353. Ed Bryant, Kurtz

## MAY, 1984

4-6—**Colorado Mountain Con**, Box 541, Leadville CO 80461. (303) 486-2016. Vail CO. Theodore Sturgeon, Ed Bryant, Stephen R. Donaldson, C. Willis, R. & M. Musgrave, J. Tannahill. Masquerade

4-6—**OnoCon**, Box 305, Syracuse NY 13208. L. S. deCamp, F. Pohl, J. K. Klein, C. Lundgren, Elliot

11-13—**TexarKon**, 1021 E. 29th, Texarkana AR 75502. Mr. & Mrs. T. Sturgeon, P. Foglio, R. Asprin

18-20—**MarCon**, Box 14078, Columbus OH 43214. C. J. ("Downbelow Station") Cherryh, artist Todd Hamilton. Masquerade & banquet. This is one of the classic Midwestern cons. Low-key and convivial

## AUGUST, 1984

30-Sep. 3—**LACon 2**, Box 8442, Van Nuys CA 91409. Anaheim CA. WorldCon 84. Join early and save.

## AUGUST, 1985

22-26—**AussieCon 2**, Box 428, Latham NY 12110 USA. Melbourne, Australia. The WorldCon for 1985.

30-Sep. 2—**ChiliCon**, Box 9612, Austin TX 78766. The North American SF Interim Con for 1985 (NASFIC's are held only in years when WorldCon is outside North America). 3000 fans are expected.

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